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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

IN RE: SOCIAL MEDIA ADOLESCENT	)	MDL Case No. 4:22-md-03047-YGR
ADDICTION/PERSONAL INJURY)	
PRODUCTS LIABILITY LITIGATION	)	Case No. 3:23-cv-02089
)	
This Document Relates to:	)	COMPLAINT FOR VIOLATIONS OF:
	)	(1) CALIFORNIA PUBLIC NUISANCE
JOHN CARROLL, in His Official Capacity as	)	LAW; (2) CALIFORNIA UNFAIR
Marin County Superintendent of Schools,	)	COMPETITION LAW; (3) RACKETEER
	)	INFLUENCED AND CORRUPT
Plaintiff,	)	ORGANIZATIONS ACT; AND
	)	(4) NEGLIGENCE AND GROSS
vs.	)	NEGLIGENCE
)	
TIKTOK INC., BYTEDANCE INC., META)	
PLATFORMS, INC., FACEBOOK)	
HOLDINGS, LLC, FACEBOOK)	
OPERATIONS, LLC, META PAYMENTS)	
INC., FACEBOOK TECHNOLOGIES, LLC,)	
INSTAGRAM, LLC, SICULUS, INC.,)	
ALPHABET INC., GOOGLE LLC, XXVI)	
HOLDINGS INC., YOUTUBE, LLC, and)	
SNAP INC.,)	
)	
Defendants.)	
)	<u>DEMAND FOR JURY TRIAL</u>

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1 I. INTRODUCTION

2 1. American adolescence is undergoing a dramatic change. Today, a staggering
 3 number of our nation's children suffer from mental and behavioral health disorders. In 2019, 13%
 4 of adolescents reported having a major depressive episode, a 60% increase from 2007. The
 5 quantum change in such cases has been fueled in part by a profound technological transformation
 6 deliberately designed by some of the country's most profitable social media¹ giants in ways that
 7 exploit for profit the vulnerabilities of children's brain development. Marin county schools have
 8 borne the consequences of all of this, firsthand, to catastrophic effect. Behavioral issues in Marin
 9 County schools have skyrocketed over the past decade, including increased incidents of youth
 10 depression, anxiety, self-harm, cyberbullying, threats to students and teachers made over social
 11 media, and property damage on school campuses as a direct result of social-media fueled trends
 12 encouraging such destruction. Teachers have seen a dramatic rise in maladaptive behaviors and
 13 in the social-emotional functioning of students. All of this adversely impacts learning.

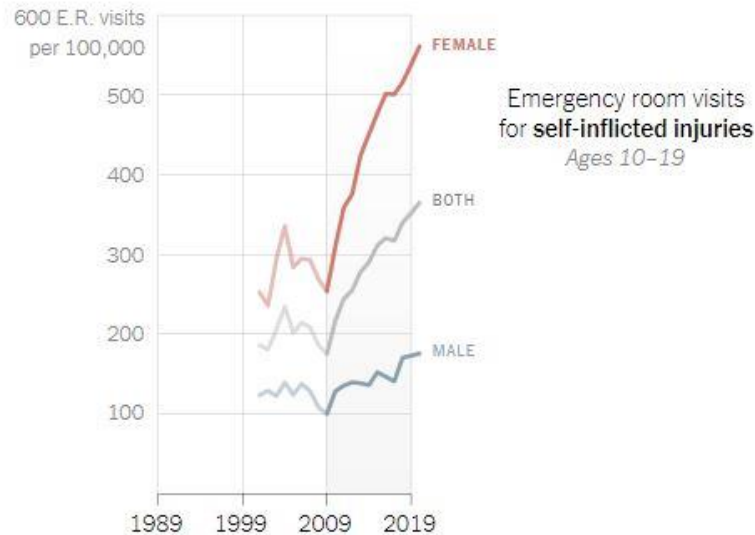
14 2. Three decades ago, the gravest public health threats to teenagers in the United
 15 States came from binge drinking, drunk driving, teen pregnancy, and smoking. With increased
 16 education, these have since fallen significantly but have been replaced by a new public health
 17 concern: soaring rates of mental health disorders, including depression, self-harm, and suicidal
 18 ideation.² Twenty percent of American children have a mental, emotional, developmental, or
 19 behavioral disorder. The rising rates of emergency room visits for suicide and self-harm leave
 20 little doubt that the physical nature of the threat has changed dramatically in the last 15 years:³

24 ¹ Social media can be defined as any form of interactive electronic communication through an
 25 internet website or application by which a user creates a service-specific identifying user profile
 to connect with other users of the internet website or application for the purpose of communicating
 and sharing information, ideas, news, stories, opinions, images, and other content.

26 ² Matt Richtel, *'It's Life or Death': The Mental Health Crisis Among U.S. Teens*, N.Y. Times
 27 (May 3, 2022), <https://www.nytimes.com/2022/04/23/health/mental-health-crisis-teens.html>.

28 ³ *Id.*

Emergency room visits for self-harm by children and adolescents rose sharply over the last decade, particularly among young women.



By The New York Times | Source: Centers for Disease Control and Prevention

3. For people aged 10 to 24, suicide rates, stable from 2000 to 2007, leapt nearly 60% by 2018 according to the Centers for Disease Control and Prevention (“CDC”).⁴ On December 7, 2021, the United States Surgeon General issued an advisory on the youth mental health crisis: ““Mental health challenges in children, adolescents, and young adults are real and widespread. Even before the pandemic, an alarming number of young people struggled with feelings of helplessness, depression, and thoughts of suicide – and rates have increased over the past decade.””⁵

4. Youth mental health problems have advanced in lockstep with the growth of social media platforms deliberately designed to attract and addict youth to the platforms by amplifying harmful material, dosing users with dopamine hits, and thereby driving youth engagement and advertising revenue. Defendants Facebook, Instagram, Snap, TikTok, and YouTube (defined below) all design, market, promote, and operate social media platforms for which they have

⁴ *Id.*

⁵ Press Release, U.S. Dep’t Health & Hum. Servs., *U.S. Surgeon General Issues Advisory on Youth Mental Health Crisis Further Exposed by COVID 19 Pandemic* (Dec. 7, 2021), <https://www.njsba.org/news-publications/school-board-notes/december-14-2021-vol-xlv-no-18/surgeon-general-warning-mental-health-crisis-for-youth/>.

1 especially cultivated a young audience. They have successfully grown their platforms
 2 exponentially over the past decade, from millions to billions of users, particularly children and
 3 teens. According to an August 30, 2022 World Economic Forum, a Pew Research Study found
 4 that almost half of United States teenagers aged 13 to 17 say they are online “almost constantly.”⁶

5 5. There is a reason America’s youth is online “almost constantly,” which is that the
 6 primary metric of success for these social media giants is engagement. The companies’ success
 7 requires more users to be on their platforms for longer periods of time in order to maximize
 8 advertising revenue. Defendants deliberately employ strategies designed to maximize
 9 engagement, including: (a) using algorithms and endless scrolls that create harmful experiences
 10 for children and teens; and (b) using Intermittent Variable Rewards (“IVRs”) or dopamine hits to
 11 intentionally alter users’ behavior, creating habits and addiction.

12 6. Defendants have designed and structured their platforms to exploit multiple neuro-
 13 psychological traits in youth, including by inducing “flow state,” manipulating social comparisons
 14 and triggering dopamine “hits.” The algorithms are neither neutral nor benign but rather amplify
 15 the most polarizing, titillating, controversial, emotionally charged, and otherwise salacious
 16 material created by third parties and by Defendants themselves. Distortions and divisiveness are
 17 not only tolerated but embraced.⁷ The longer a user is on, the more extreme the material required
 18 to keep that user on. It can, and often does, create an alternate reality defined by conspiracy and
 19 rage. The endless feeds promoted, often unhealthy or outright harmful for our children and teens,
 20 are deliberately engineered to exploit the frailties of their developing brains and maximize their
 21 engagement using many of the same techniques found in slot machines. However, instead of
 22 feeding money into machines, our youth are feeding Defendants’ platforms with their time and
 23 attention.

24
 25 ⁶ Stefan Ellerbeck, *Half of U.S. teens use the internet ‘almost constantly.’ But where are they*
 26 *spending their time online?*, World Economic Forum (Aug. 30, 2022),
[https://www.weforum.org/agenda/2022/08/social-media-internet-online-teenagers-screens-](https://www.weforum.org/agenda/2022/08/social-media-internet-online-teenagers-screens-us/#:~:text=The%20number%20of%20teens%20using,from%202014%2D15%20to%202022.)
[us/#:~:text=The%20number%20of%20teens%20using,from%202014%2D15%20to%202022.](https://www.weforum.org/agenda/2022/08/social-media-internet-online-teenagers-screens-us/#:~:text=The%20number%20of%20teens%20using,from%202014%2D15%20to%202022.)

27 ⁷ Max Fisher, *The Chaos Machine: The Inside Story of How Social Media Rewired Our Minds*
 28 *and Our World* at 22-23 (2022) (“Chaos Machine”).

7. The platform designs have allowed Defendants to grow not only their user bases but the frequency and time spent by users. In 2018, Facebook researchers warned of the dangers of systems designed to deliver users more and more divisive content to increase their time on the platform.⁸ A flicker of anger is amplified to wildfire because people pay attention to fire. Extreme and/or sensationalistic views, even if held by a small group, are algorithmically promoted, amplified, and perceived by users to be more popular and accurate than they are because controversy and confusion keep people paying attention for longer periods of time. Attention equals engagement, and engagement equals advertising revenue. Defendants' growth is a product of choices they made to design and operate their platforms in ways that exploit the psychology and neurophysiology of their users, particularly children and teens, into spending more and more time on their platforms.

8. Defendants also exploit the weakness of developing minds with continuous dopamine hits, akin to that experienced in a casino, with what is known as the "social-validation feedback loop." As former Napster founder and Facebook president Sean Parker ("Parker") explained:

"The thought process that went into building these applications . . . was all about, 'How do we consume as much of your time and conscious attention as possible?'"
To do that, he said, ***"We need to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post or whatever. And that's going to get you to contribute more content, and that's going to get you more likes and comments."***⁹

9. These manipulations were deliberately built into the platforms from the beginning, as further noted by Parker:

I mean, it's exactly the kind of thing that a hacker like myself would come up with because you're exploiting a vulnerability in human psychology. [chuckles]
And I think that we . . . you know, ***the inventors, creators, and it's me, it's Mark,***

⁸ Jeff Horwitz & Deepa Seetharaman, *Facebook Executives Shut Down Efforts to Make the Site Less Divisive*, Wall St. J. (May 26, 2020), <https://www.wsj.com/articles/facebook-knows-it-encourages-division-top-executives-nixed-solutions-11590507499>.

⁹ *Chaos Machine* at 24-25.

1 *it's Kevin Systrom at Instagram. It's all of these people [who] understood this*
 2 *consciously, and we did it anyway.*¹⁰

3 10. The platforms are especially effective and harmful to Defendants' youth audience,
 4 who are more vulnerable because their brains are still developing. Adolescents have a stronger
 5 drive to socialize than adults, which manifests as heavier use of social networks and a greater
 6 sensitivity to what happens there. Social apps hijack a tween and teen compulsion – to connect –
 7 that can be even more powerful than hunger or greed. As noted in a 2018 article in *The Daily*
 8 *Beast* entitled: "Just How Bad is Kids' Smartphone Addiction?", republished by Stanford
 9 University's Wu Tsai Neurosciences Institute, adolescents are at heightened risk of social media
 10 addiction and harm:

11 Anna Lembke is an assistant professor of psychiatry and behavioral
 12 sciences at the Stanford University Medical Center, and she's studied addiction
 extensively, both substance abuse and technology. She said the way we absorb the
 cool blue glow of a screen is akin to the electricity a drug user may feel.

13 *"Smartphone screens light up the same area of the brain as opioids and*
 14 *cannabis,"* she told The Daily Beast. "The rewards pathways mediated by
 15 dopamine respond to screens in a very similar way to opioids." *What makes*
 16 *adolescents especially vulnerable to the addictive nature of smartphones is that*
 17 *they are in a crucially pliable point of their mental and physical growth. "They're*
 18 *incredibly socially sensitive"*

19 * * *

20 *"[They] are more vulnerable to risk taking, so the emotion centers of the*
 21 *brain drive behavior more than the future planning centers of the brain" . . .*
 22 *which is why teens are impulsive enough to take risks without recognizing future*
 23 *consequences. Their brains are pliable because adolescence is a time when*
 24 *neurons undergo pruning, fundamentally altering the shape and structure of the*
 25 *brain from one of a child's into that of an adult's.*

26 Online, that can be dangerous: It can lead to slut shaming when kids send
 27 and receive nude photos without thinking about ramifications, for example, or
 28 bullying on anonymous messaging apps Being turned on by peers *can be*
*devastating for a teen and in some extreme, tragic cases lead to suicide.*¹¹

25 ¹⁰ *The Social Dilemma – 2020 Transcript*, Scraps from the Loft (Oct. 3, 2020),
 26 <https://scrapsfromtheloft.com/movies/the-social-dilemma-movie-transcript/>.

27 ¹¹ Tanya Basu, *Just How Bad is Kids' Smartphone Addiction?*, The Daily Beast (Jan. 9, 2018),
 28 <https://www.thedailybeast.com/just-how-bad-is-kids-smartphone-addiction>; *Just How Bad Is*
Kid' Smartphone Addiction? | Wu Tsai Neurosciences Institute (stanford.edu).

11. The need to fit in and the desire to be popular and gain social points mean that children this age are especially vulnerable to falling for the “social media contagion effect,” the term Dr. Lembke uses to describe a child doing something just because a peer is doing it.¹² That reasoning is simply logical in an adolescent’s brain. Yet there is almost no limit to who can be targeted, or how viciously, on social media:

*The Silicon Valley dream of freedom from laws and hierarchies has become, online, freedom from social and moral codes as well. The community has created its own standards . . . but around the organizing profit-driving incentive of all social media: attention – at significant cost to the mental health of America’s youth.*¹³

12. Increasingly, experts who study the effects of social media on teenagers report on the dangers, including: (a) social comparison (when everyone else’s life or body looks better online); (b) displacement (social media replacing sleep, exercise, and real interaction); and (c) algorithms that prod children to stay engaged with endless feeds creating harmful experiences. Some of these impacts disproportionately affect girls. Jean Twenge (“Twenge”), a psychology professor at San Diego State University and a leading expert on the subject, states: “There is a substantial link to depression, and that link tends to be stronger among girls” and “[t]he same is true for self-harm. . . . ‘The more hours a day she spends using social media, the more likely she is to engage in self-harm behaviors – the link is there for boys as well, it’s just not as large.’”¹⁴ Twenge further reports: “Most of the large studies show that heavy users of social media are about twice as likely to be depressed as light users.”¹⁵ Similarly, young boys are “especially susceptible” to extremism and radicalization online because, as reported by Cynthia Miller-Idris, the Director of Online Research at American University’s Polarization and Extremism Innovation Lab in addressing on-line-mass-shooter-radicalization, “[they spend] more time online and

¹² *Id.*

¹³ *The Chaos Machine* at 55.

¹⁴ Jennifer A. Kingson, *Social media’s effects on teen mental health comes into focus*, Axios (Jan. 11, 2023), <https://www.axios.com/2023/01/11/social-media-children-teenagers-mental-health-tiktok-meta-facebook-snapchat>.

¹⁵ *Id.*

1 [around] more circulation of conspiracy theories and hateful content created a kind of tinderbox
 2 . . . So, kids are being affected by this whether they are . . . being drawn into hateful content as a
 3 perpetrator or [being] victimized.”¹⁶

4 13. Federal research shows that teenagers as a group are getting less sleep and exercise
 5 and spending less in-person time with friends – all crucial for healthy development – at a period
 6 in life when it is typical to test boundaries and explore one’s identity. The combined result for
 7 some adolescents is a kind of cognitive implosion: anxiety, depression, compulsive behaviors, self-
 8 harm, vandalism, violence, and even suicide.

9 14. This is why the California state legislature passed the Age-Appropriate Design
 10 Code Act (“AADCA”) into law in September 2022.¹⁷ This bill is aimed at protecting children
 11 under 18 years of age and applies to any website or online service that is likely to be accessed by
 12 children under 18 years of age. It requires the makers of online platforms that children are likely
 13 to access to identify the material risk of new online products, services, or features by determining
 14 whether the design of such products and services could expose children to harm. The bill
 15 acknowledges, “[A]s *children spend more of their time interacting with the online world, the*
 16 *impact of the design of online products and services on children’s well-being has become a focus*
 17 *of significant concern.*”¹⁸

18 15. Like virtually all schools in the United States now, Marin County schools are forced
 19 to address a high degree of distraction, depression, suicidality, and other mental disorders suffered
 20 by children, caused or worsened by the overconsumption of social media on a daily basis, which
 21 substantially interferes with the District’s paramount mission to educate Marin County students.
 22 Indeed, Marin County schools have had to increase their mental and behavioral health services and
 23 channel significant time and resources to manage situations and crises that take place on, or are

24
 25 ¹⁶ *Examining the warning signs of online extremism targeting young people*, YouTube,
<https://www.youtube.com/watch?v=AA4LqDeYQAQ>.

26 ¹⁷ The California Age-Appropriate Design Code Act, A.B. 2237, 117th Cong. (2022),
 27 https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2273.

28 ¹⁸ *Id.*

exacerbated by, Defendants' social media platforms. Plaintiff has expanded individual and small group counseling to students, begun offering digital citizenship trainings on healthy use of social media for students and teachers, made changes to school policies, and developed detailed intervention plans to address the harms created by Defendants' platforms. The need is that great.

16. This complaint does not seek to disparage, discipline or discourage technology. Social media has the potential to be a useful tool for learning and growth for entrepreneurship and showcasing one's skills. However, these platforms increasingly define the world around our youth, creating social realities and interactions. Safe and healthy social media use by children and teens lies in stark contrast with the deliberate design of platforms to: (a) flood children and teens with as much divisive and harmful content as possible, for as long as possible; and (b) ultimately addict them, all for the sake of profit. This is having deep and dangerous ramifications on our youth, our communities, and our schools that simply cannot be ignored. These social media giants can and should take measures to stem the tide of the mental health crisis afflicting America's social media-addicted youth.

II. JURISDICTION AND VENUE

17. This Court has subject matter jurisdiction over various constituent cases in this multidistrict litigation pursuant to 28 U.S.C. §1332(a) because plaintiffs and defendants in many of such cases are residents of different states, and the amount in controversy exceeds \$75,000.

18. This Court has subject matter jurisdiction over this particular action pursuant to 28 U.S.C. §1331 because it involves questions of federal law arising under the Racketeer Influenced and Corrupt Organizations Act ("RICO"), 18 U.S.C. §1961, *et seq.*, and the Children's Online Privacy Protection Act of 1998 ("COPPA"), 15 U.S.C. §§1601-6505. Additionally, Defendants are expected to raise federal defenses arising under the Federal Communications Decency Act, 47 U.S.C. §230. This court has supplemental jurisdiction under 28 U.S.C. §1367(a) over Plaintiffs' state law claims because all claims alleged herein form part of the same case or controversy.

19. The Court has personal jurisdiction over Defendants because they do business in the Northern District of California and have sufficient minimum contacts with the District. Defendants intentionally avail themselves of the markets in this State through the promotion,

1 marketing, and operations of their platforms at issue in this lawsuit in California, and by retaining
 2 the profits and proceeds from these activities, to render the exercise of jurisdiction by this Court
 3 permissible under California law and the United States Constitution.

4 20. Venue is proper within this District and this Division pursuant to 28 U.S.C. §1391
 5 and Civil L.R. 3-2(c) because a substantial part of the events or omissions giving rise to the claims
 6 at issue in this Complaint arose in this District, and Defendants are subject to the Court's personal
 7 jurisdiction with respect to this action.

8 **III. THE PARTIES**

9 **A. Plaintiff**

10 21. John Carroll, in his official capacity as Marin County Superintendent of Schools
 11 ("Plaintiff"), is entrusted with oversight over Marin County's public schools across 17 school
 12 districts, which collectively serve over 40,000 students.¹⁹ The Office of the Marin County
 13 Superintendent of Schools provides centralized services to all of the public schools in Marin
 14 County, including in areas of student health and safety. The school districts include: Bolinas-
 15 Stinson Union School District, Kentfield School District, Laguna Joint School District, Lagunitas
 16 School District, Larkspur-Corte Madera School District, Mill Valley School District, Miller Creek
 17 Elementary School District, Nicasio School District, Novato Unified School District, Reed Union
 18 School District, Ross School District, Ross Valley School District, San Rafael City Schools,
 19 Sausalito Marin City School District, Shoreline Unified School District, and Tamalpais Union
 20 High School District.

21 **B. Defendants**

22 **1. TikTok and ByteDance Entities**

23 22. Defendant TikTok Inc. was incorporated in the State of California on April 30,
 24 2015, with its principal place of business in Culver City, California. TikTok Inc. transacts or has
 25 transacted business in this District and throughout the United States. At all times material to this
 26 Complaint, acting alone or in concert with others, TikTok Inc. has advertised, marketed, and

27
 28 ¹⁹ See Cal. Educ. Code §1240(a).

1 distributed the TikTok Inc. social media platform to consumers throughout the United States. At
2 all times material to this Complaint, acting alone or in concert with ByteDance (defined below),
3 TikTok Inc. formulated, directed, controlled, had the authority to control, or participated in the
4 acts and practices set forth in this Complaint.

5 Defendant ByteDance Inc. (“ByteDance”) is a Delaware corporation with its principal
6 place of business in Mountain View, California. ByteDance transacts or has transacted business
7 in this District and throughout the United States. At all times material to this Complaint, acting
8 alone or in concert with others, ByteDance has advertised, marketed, and distributed the TikTok
9 Inc. social media platform to consumers throughout the United States. At all times material to this
10 Complaint, acting alone or in concert with TikTok Inc., ByteDance formulated, directed,
11 controlled, had the authority to control, or participated in the acts and practices set forth in this
12 Complaint. TikTok Inc. and ByteDance are hereinafter collectively referred to as “TikTok.”

13 **2. Meta, Facebook, and Instagram Entities**

14 23. Defendant Meta Platforms, Inc. (“Meta”), formerly known as Facebook, Inc., is a
15 Delaware corporation with its principal place of business in Menlo Park, California. Defendant
16 Meta builds and maintains technologies for social media platforms, communication platforms, and
17 electronic devices that are widely available to users throughout the United States. The platforms
18 developed and maintained by Meta include Facebook (including its self-titled application,
19 Marketplace, and Workplace), Messenger (including Messenger Kids), Instagram, and a line of
20 electronic virtual reality devices and services called Meta Quest (formerly Oculus) (collectively,
21 “Meta platforms”).

22 24. Defendant Meta’s subsidiaries include Defendants Facebook Holdings, Facebook
23 Operations, Meta Payments, Facebook Technologies, Siculus (all defined below, and collectively,
24 with Meta, “Facebook”), and Instagram.

25. Defendant Meta’s platforms, Facebook and Instagram, are among the most popular social networking platforms in the world, with more than 3.6 billion users worldwide.²⁰

26. In addition to Meta maintaining its principal place of business within this District, Meta transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with its subsidiaries, Meta has advertised, marketed, and distributed the Meta platforms to consumers throughout the United States. At all times material to this Complaint, Meta formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

27. Defendant Meta’s subsidiary, Defendant Facebook Holdings, LLC (“Facebook Holdings”), was organized under the laws of the State of Delaware on March 11, 2020 and is a wholly-owned subsidiary of Meta. Facebook Holdings is primarily a holding company for entities involved in Meta’s supporting and international endeavors, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Facebook Holdings.

28. Defendant Meta’s subsidiary, Defendant Facebook Operations, LLC (“Facebook Operations”), was organized under the laws of the State of Delaware on January 8, 2012 and is wholly owned by Meta. The principal place of business of Facebook Operations is in Menlo Park, California. Defendant Meta is the sole member of Facebook Operations.

29. Defendant Meta’s subsidiary, Defendant Meta Payments Inc. (“Meta Payments”), was incorporated in the State of Florida on December 10, 2010 as Facebook Payments Inc. In July 2022, the entity’s name was amended to Meta Payments Inc. Meta Payments is a wholly-owned subsidiary of Meta. Meta Payments manages, secures, and processes payments made through Meta, among other activities, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Meta Payments.

30. Defendant Meta’s subsidiary, Defendant Facebook Technologies, LLC (“Facebook Technologies”), was organized under the laws of the State of Delaware as “Oculus VR, LLC” on

²⁰ Felix Richter, *Meta Reaches 3.6 billion People Each Month*, Statista (Oct. 29, 2021), <https://www.statista.com/chart/2183/facebooks-mobile-users/>.

March 21, 2014 and acquired by Meta on March 25, 2014. Facebook Technologies develops Meta's virtual and augmented reality technology, such as the Meta Quest line of services, among other technologies related to Meta's platforms, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Facebook Technologies.

31. Defendant Meta's subsidiary, Defendant Instagram, LLC ("Instagram"), was founded by Kevin Systrom and Mike Krieger in October 2010 and is a social media platform designed for photo and video sharing. In April 2012, Meta purchased the company for approximately \$1 billion. Meta reformed the limited liability company under the laws of the State of Delaware on April 7, 2012, and its principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Instagram.

32. Defendant Meta's subsidiary, Defendant Siculus, Inc. ("Siculus"), was incorporated in the State of Delaware on October 19, 2011. Siculus is a wholly-owned subsidiary of Meta that supports Meta platforms by constructing data facilities and other projects. Siculus' principal place of business is in Menlo Park, California. Defendant Meta is the sole member of Siculus.

3. Alphabet, Google, and YouTube Entities

33. Defendant Alphabet Inc. ("Alphabet") is a Delaware corporation with its principal place of business in Mountain View, California. Alphabet is the sole stockholder of XXVI Holdings (defined below)

34. Defendant XXVI Holdings Inc. ("XXVI Holdings") is a Delaware corporation with its principal place of business in Mountain View, California. XXVI Holdings is a wholly-owned subsidiary of Alphabet and the managing member of Google (defined below).

35. Defendant Google LLC ("Google") is a limited liability company organized under the laws of the State of Delaware, and its principal place of business is in Mountain View, California. Google is a wholly-owned subsidiary of XXVI Holdings and the managing member of YouTube, LLC. Google transacts or has transacted business in this District and throughout the United States. At all times material to this Complaint, acting alone or in concert with others, Google has advertised, marketed, and distributed its YouTube video sharing platform to consumers

1 throughout the United States. At all times material to this Complaint, acting alone or in concert
 2 with YouTube, LLC, Google formulated, directed, controlled, had the authority to control, or
 3 participated in the acts and practices set forth in this Complaint.

4 36. Defendant YouTube, LLC is a limited liability company organized under the laws
 5 of the State of Delaware, and its principal place of business is in San Bruno, California. YouTube,
 6 LLC is a wholly owned subsidiary of Google. YouTube, LLC transacts or has transacted business
 7 in this District and throughout the United States. At all times material to this Complaint, acting
 8 alone or in concert with Defendant Google, YouTube, LLC has advertised, marketed, and
 9 distributed its YouTube social media platform to consumers throughout the United States. At all
 10 times material to this Complaint, acting alone or in concert with Google, YouTube, LLC
 11 formulated, directed, controlled, had the authority to control, or participated in the acts and
 12 practices set forth in this Complaint.

13 37. Defendants Alphabet, XXVI Holdings, Google, and YouTube, LLC are hereinafter
 14 collectively referred to as “YouTube.”

15 **4. Snap Inc.**

16 38. Defendant Snap Inc. (“Snap”) is a Delaware corporation with its principal place of
 17 business in Santa Monica, California. Snap transacts or has transacted business in this District and
 18 throughout the United States. At all times material to this Complaint, acting alone or in concert
 19 with others, Snap has advertised, marketed, and distributed the Snapchat social media platform to
 20 consumers throughout the United States. At all times material to this Complaint, Snap formulated,
 21 directed, controlled, had the authority to control, or participated in the acts and practices set forth
 22 in this Complaint.

23 **IV. FACTUAL ALLEGATIONS COMMON TO ALL CLAIMS**

24 39. The dawn of the social media era is generally considered to be approximately 2006
 25 to 2007, when, on the heels of Yahoo’s failed attempt to acquire Facebook for \$1 billion, Facebook
 26 revamped its home page to launch a newsfeed that provided each user with a continuous
 27
 28

1 personalized feed of what that user's friends were doing.²¹ The newsfeed drove engagement and
 2 thus advertising revenue as Facebook membership exploded by 600% to 700%, and suddenly
 3 everyone had total unblinking visibility into the digital lives of everyone else. When the newsfeed
 4 launched in 2006, 11% of Americans were on social media (between 2% and 4% used Facebook).²²
 5 By fall 2007, Facebook was valued at \$15 billion. By 2014, nearly two-thirds of Americans used
 6 social media platforms, with Facebook and YouTube being nearly universal.

7 **A. Social Media Addiction Is Prevalent Among America's Youth**

8 40. Social Media has been likened to a "casino that fits in your pocket," training us to
 9 "answer any dip in our happiness with a pull at the most ubiquitous slot machine in history."²³
 10 Researchers studying the effect social media has on the brain have shown that social media exploits
 11 "the same neural circuitry" as "gambling and recreational drugs to keep consumers using their
 12 platforms as much as possible." All are addictive because of the neurological chemical dopamine,
 13 which is released with the pulsing colorful notification sounds and vibrations associated with a
 14 "reward" – for example, a Snapchat with a friend.²⁴ "But when that dopamine reward system gets
 15 hijacked, it can compel you to repeat self-destructive behaviors. To place one more bet, binge on
 16 alcohol – or spend hours on apps even when they make you unhappy."²⁵

17 41. Defendants deliberately designed and marketed exploitative and addictive social
 18 media platforms specifically targeting youth. They have been extremely successful in their efforts.
 19 Ninety percent of children aged 13 to 17 use social media.²⁶ Younger children also regularly use
 20

21 ²¹ *Chaos Machine* at 20-21.

22 ²² *Id.* at 23.

23 ²³ *Id.* at 27.

24 ²⁴ *Id.* at 26.

25 ²⁵ *Id.*

26 ²⁶ *Social Media and Teens*, Am. Acad. Child & Adolescent Psych. (Mar. 2018),
 27 [https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-](https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx)
 28 [Media-and-Teens-100.aspx](https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx).

1 social media. One study reported 38% of children aged 8 to 12 used social media in 2021.²⁷ Other
 2 studies reveal numbers as high as 49% of children aged 10 to 12 use social media and 32% of
 3 children aged 7 to 9 use social media.²⁸

4 42. The most popular of these platforms is YouTube. A vast majority – 95% – of
 5 children aged 13 to 17 have used YouTube.²⁹

6 43. TikTok has skyrocketed in popularity with teenagers since its merger with
 7 Musical.ly in 2018. TikTok is now the second most popular social media platform, with over 67%
 8 of children aged 13 to 17 having used the app.³⁰

9 44. Instagram’s numbers are comparable to TikTok, with 62% of children aged 13 to
 10 17 reporting they have used the app.³¹

11 45. Snapchat also remains popular with youth, with 59% of children aged 13 to 17
 12 reporting they have used the app.³²

13 46. Facebook is the fifth most popular social media platform, with 32% of children
 14 aged 13 to 17 reporting they have used Facebook’s app or website.³³

15 47. Teenagers who use these social media platforms are also likely to use them
 16 continuously. One study estimates that 62% of children aged 13 to 18 use social media every
 17

18
 19 ²⁷ Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens at 5*,
 20 Common Sense Media (2022), https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.

21 ²⁸ *Sharing Too Soon? Children and Social Media Apps*, 39(4) C.S. Mott Child.’s Hosp. Univ.
 22 Mich. Health (Oct. 18, 2021), https://mottpoll.org/sites/default/files/documents/101821_SocialMedia.pdf.

23 ²⁹ Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10,
 24 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

25 ³⁰ *Id.*

26 ³¹ *Id.*

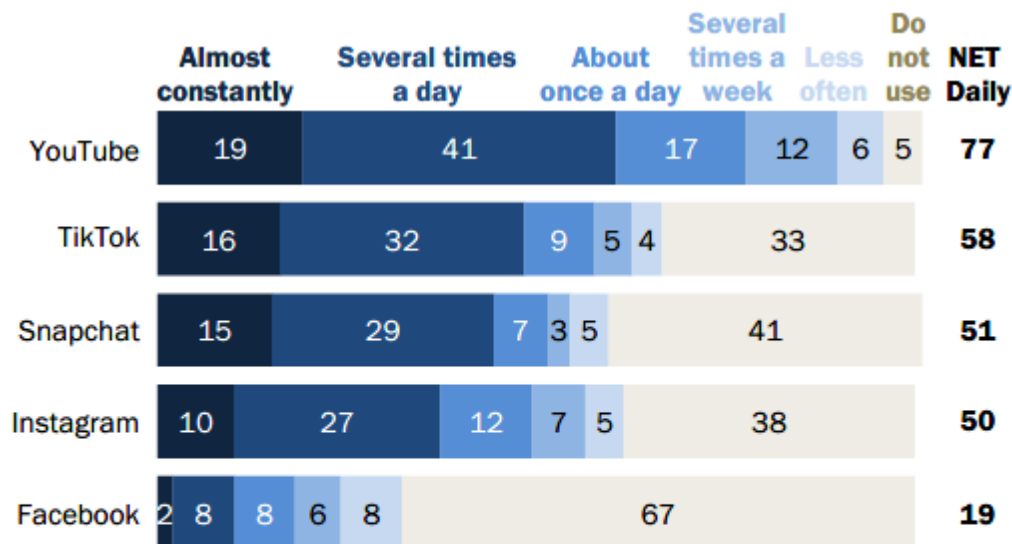
27 ³² *Id.*

28 ³³ *Id.*

day.³⁴ An increasing number of younger children also use social media daily, with 18% of children aged 8 to 12 reporting using a social media site at least once a day.³⁵

48. Daily use for many teenagers does not consist of logging onto a platform just once. Rather, many teenage users check social media repeatedly throughout the day. In one study, teenage users reported checking Snapchat 30 times a day on average.³⁶

49. Even more alarming, some teenagers never stop looking at social media.³⁷



Note: Teens refer to those ages 13 to 17. Those who did not give an answer are not shown. Figures may not add up to the NET values due to rounding.

Source: Survey conducted April 14-May 4, 2022.

"Teens, Social Media and Technology 2022"

PEW RESEARCH CENTER

³⁴ Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens* at 4, Common Sense Media (2022), https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.

³⁵ *Id.* at 5.

³⁶ Erinn E. Murphy et al., *Taking Stock with Teens: 21 Years of Researching U.S. Teens GenZ Insights* at 13, Piper Sandler (Fall 2021), https://piper2.bluematrix.com/docs/pdf/3bad99c6-e44a-4424-8fb1-e3adfcdb1d4.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosam&stream=top.

³⁷ Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens* at 4, Common Sense Media (2022), https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf; Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

1
2 50. Nearly 32% of teens have declared YouTube the app they would not want to live
3 without almost constantly.³⁸ Nearly 16% and 15% of teens report that they constantly use TikTok
4 and Snapchat, respectively.³⁹ Meanwhile, 10% of teens use Instagram almost constantly.⁴⁰ Thirty-
5 two percent of teens report using Facebook.⁴¹

6 51. Teenagers are aware that social media has a significant hold on their lives, yet they
7 still cannot stop using it. Thirty-six percent of teenagers admit they spend too much time on social
8 media.⁴² Over half of teens say that giving up social media would be somewhat hard, with nearly
9 one in five teens saying giving up social media would be very hard.⁴³ Of the subgroup of teenagers
10 who use at least one platform “almost constantly,” 71% said giving up social media would be hard,
11 with 32% saying giving up social media would be very hard.⁴⁴

12 52. Teenagers report symptoms of addiction disorders with regard to social media. For
13 instance, the more teenagers use social media, the harder it is for them to give it up. Teenagers
14 who acknowledge that they spend too much time on social media are almost twice as likely to say
15 that giving up social media would be difficult as teens who see their social media usage as about
16 right.⁴⁵

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19
20 ³⁸ Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10,
21 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

22 ³⁹ *Id.*

23 ⁴⁰ *Id.*

24 ⁴¹ *Id.*

25 ⁴² *Id.*

26 ⁴³ *Id.*

27 ⁴⁴ *Id.*

28 ⁴⁵ *Id.*

53. Despite using social media frequently, most youth do not enjoy it. Only 27% of boys and 42% of girls aged 8 to 18 reported enjoying social media “a lot” in 2021.⁴⁶

B. Social Media Has Widespread, Harmful, and Often Tragic Effects on Youth Mental Health

54. The dimensions of the youth mental health crisis are alarming by all accounts. There are many severe and broadly negative effects of social media use on youth mental health. Social media use is linked to increases in mental, emotional, developmental, and behavioral disorders. They include cyberbullying, eating disorders, cutting, depression, anxiety, sleep disorders, and suicide-related outcomes. These negative impacts have been demonstrated by both independent research and internal data from the social media platforms themselves.

55. In general, electronic screen use causes lower psychological well-being.⁴⁷ This link is especially apparent among adolescents. Those with high screen time are twice as likely to receive diagnoses of depression or anxiety or to need treatment for mental or behavioral health conditions compared to low screen time users.⁴⁸

⁴⁶ Victoria Rideout et al., *The Common Sense Census: Media Use by Tweens and Teens* at 34, Common Sense Media (2022), https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf.

⁴⁷ Jean M. Twenge & W. Keith Campbell, *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study*, 12 *Prev. Med. Rep.* 271-83 (2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6214874/>; Ariel Shensa et al., *Social Media Use and Depression and Anxiety Symptoms: A Cluster Analysis*, 42(2) *Am. J. Health Behav.* 116-28 (2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5904786/>; *Effects of Social Media on Children*, Cleveland Clinic (Dec. 3, 2021), <https://health.clevelandclinic.org/dangers-of-social-media-for-youth/>.

⁴⁸ Jean M. Twenge & W. Keith Campbell, *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study*, 12 *Prev. Med. Rep.* 271-83 (2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6214874/>.

56. Social media specifically has a “detrimental effect on the psychological health of its users.”⁴⁹ One systematic review of 16 studies on the effects of social media on mental health found social media use increases levels of anxiety and depression.⁵⁰

57. Social media also has detrimental effects on the mental health of adolescents specifically. High social media use increases depressive symptoms, suicide-related outcomes, and suicide rates among adolescents.⁵¹

58. The harm to youth from social media use increases with the amount of time spent on these platforms. One study found that the investment of time in social media by adolescents is linked to higher levels of depression and lower self-esteem.⁵² “U.S. teenagers who spend 3 hours a day or more on electronic devices are 35% more likely, and those who spend 5 hours or more are 71% more likely, to have a risk factor for suicide than those who spend less than 1 hour.”⁵³

59. One of the primary reasons the use of social media is associated with depressive symptoms among adolescents is that it encourages unhealthy social comparison and feedback-seeking behaviors.⁵⁴ Because adolescents spend a majority of their time on social media looking at other users’ profiles and photos, they are likely to engage in negative comparisons with their

⁴⁹ Fazida Karim et al., *Social Media Use and Its Connection to Mental Health: A Systemic Review*, 12(6) *Cureus* (June 15, 2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7364393/>.

⁵⁰ *Id.*

⁵¹ Jean M. Twenge et al., *Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time*, 6(1) *Clinical Psych. Sci.* 3-17 (2017), <https://doi.org/10.1177/2167702617723376>.

⁵² Corey J. Blomfield Neira & Bonnie L. Barber (2014) *Social networking site use: Linked to adolescents' social self-concept, self-esteem, and depressed mood*, *Australian Journal of Psychology*, 66:1, 56-64, <https://www.tandfonline.com/doi/full/10.1111/ajpy.12034>.

⁵³ Anne Sheehan, *Letter from JANA Partners & CalSTRS to Apple, Inc.*, Harvard Law School Forum on Corporate Governance (Jan. 19, 2018), <https://corpgov.law.harvard.edu/2018/01/19/joint-shareholder-letter-to-apple-inc/> (citing Jean M. Twenge, PhD. *iGen*. New York: Atria Books (an imprint of Simon & Schuster), 2017).

⁵⁴ Jacqueline Nesi & Mitchell J. Prinstein, *Using Social Media for Social Comparison and Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms*, 43(8) *J. Abnormal Child Psych.* 1427-38 (Nov. 2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5985443/>.

1 peers.⁵⁵ Specifically, adolescents are likely to engage in harmful upward comparisons with others
 2 whom they perceive to be more popular.⁵⁶

3 60. Clinicians have also observed a clear relationship between youth social media use
 4 and disordered eating behavior.⁵⁷ The more social media accounts an adolescent has, the greater
 5 disordered eating behaviors they exhibit. Additionally, research shows the more time young girls
 6 spend on social media platforms, such as Instagram and Snapchat, the more likely they are to
 7 develop disordered eating behaviors.⁵⁸

8 61. Social media has created an environment where self-harm and suicidality is
 9 glorified, promoting youth to compete for who can cut the deepest or starve themselves the most.⁵⁹
 10 Experts say that sharing pictures of harmful practices encourages others to harm themselves by, in
 11 essence, normalizing the behavior.⁶⁰

12 62. Social media has also caused an increase in cyberbullying. The more time an
 13 individual, especially males, spends on social media, the more likely they are to commit acts of
 14

15
 16 ⁵⁵ *Id.*; see also Nino Gugushvili et al., *Facebook use intensity and depressive symptoms: a*
 17 *moderated mediation model of problematic Facebook use, age, neuroticism, and extraversion* at
 18 3, BMC Psych. 10, 279 (Nov. 28, 2022), <https://doi.org/10.1186/s40359-022-00990-7> (explaining
 that youth are particularly vulnerable because they “use social networking sites for construing their
 identity, developing a sense of belonging, and for comparison with others”).

19 ⁵⁶ Jacqueline Nesi & Mitchell J. Prinstein, *Using Social Media for Social Comparison and*
 20 *Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms*,
 43(8) J. Abnormal Child Psych. 1427-38 (Nov. 2015), [https://www.ncbi.nlm.nih.gov/pmc/articles/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5985443/)
 PMC5985443/.

21 ⁵⁷ Simon M. Wilksch et al., *The relationship between social media use and disordered eating in*
 22 *young adolescents*, 53 Int’l J. Eating Disorders 96-106 (2020), [https://pubmed.ncbi.nlm.nih.gov/](https://pubmed.ncbi.nlm.nih.gov/31797420/)
 31797420/.

23 ⁵⁸ *Id.*

24 ⁵⁹ Cindy Krischer Goodman, *Hiding in plain sight: Inside the online world of suicidal teens*
 25 *anguished, armed and impulsive*, S. Fla. Sun-Sentinel (Jan. 12, 2020), [https://www.sun-](https://www.sun-sentinel.com/news/florida/fl-ne-teen-suicide-hidden-online-world-20200110-tj767jdoerh4jpw5zaomv26eum-story.html)
 26 [sentinel.com/news/florida/fl-ne-teen-suicide-hidden-online-world-20200110-tj767jdoerh4jpw](https://www.sun-sentinel.com/news/florida/fl-ne-teen-suicide-hidden-online-world-20200110-tj767jdoerh4jpw5zaomv26eum-story.html)
 5zaomv26eum-story.html.

27 ⁶⁰ Kimberly Leonard, *Is Social Media Making Self-Harm Worse for Teens?*, U.S. News (May 29,
 28 2015), [https://www.usnews.com/news/articles/2015/05/29/is-social-media-making-self-harm-](https://www.usnews.com/news/articles/2015/05/29/is-social-media-making-self-harm-worse-for-teens)
 worse-for-teens.

cyberbullying.⁶¹ Cyberbullying is now so common that most American teens, 59%, have experienced some form of the behavior.⁶² This number includes: (a) 42% of teens experiencing name calling; (b) 32% being subjected to false rumors; (c) 25% receiving an unsolicited explicit image; (d) 21% being subjected to online stalking; (e) 16% receiving physical threats online; and (f) 7% having had explicit images of them shared without their consent.⁶³ Exposure to cyberbullying on social media is more prevalent for youth identifying as LGBTQ, and is linked with increased reporting of depression and suicidality in the LGBTQ youth population.⁶⁴

63. Social media has also played a role in perpetuating youth violence by, for example, amplifying gang communications promoting and calling for violence or promoting fight compilations to millions of viewers. Continual exposure to such violence can have adverse effects on youth. Meta-analyses of the unhealthy effects of media violence have shown that youth who view violent content regularly are more likely to exhibit antisocial behavior, accept violent behavior, and experience increased feelings of hostility.⁶⁵

64. Social media use also contributes to sleep deprivation. Young adults who spend a lot of time on social media during the day or check it frequently throughout the week are more likely to suffer sleep disturbances than their peers who use social media infrequently.⁶⁶ In turn,

⁶¹ Amanda Giordano et al., *Understanding Adolescent Cyberbullies: Exploring Social Media Addiction and Psychological Factors*, 7(1) J. Child & Adolescent Counseling 42-55 (2021), <https://www.tandfonline.com/doi/abs/10.1080/23727810.2020.1835420?journalCode=ucac20>.

⁶² Monica Anderson, *A Majority of Teens Have Experienced Some Form of Cyberbullying*, Pew Rsch. Ctr. (Sept. 27, 2018), <https://www.pewresearch.org/internet/2018/09/27/a-majority-of-teens-have-experienced-some-form-of-cyberbullying/>.

⁶³ *Id.*

⁶⁴ Cesar G. Escobar-Viera, et al., *For Better or for Worse? A Systematic Review of the Evidence on Social Media Use and Depression Among Lesbian, Gay, and Bisexual Minorities*, JMIR Mental Health (Mar. 23, 2018), <https://mental.jmir.org/2018/3/e10496>.

⁶⁵ Brittany Bostic, *Does Social Media Perpetuate Youth Violence?*, Mich. Youth Violence Prevention Ctr. (Feb. 20, 2024), <https://yvpc.sph.umich.edu/social-media-perpetuate-youth-violence/>.

⁶⁶ Jessica C. Levenson, et al., *The Association Between Social Media Use and Sleep Disturbance Among Young Adults*, 85 Preventive Med. 36-41 (Apr. 2016), <https://www.sciencedirect.com/science/article/abs/pii/S0091743516000025>.

1 disturbed and insufficient sleep is associated with poor health outcomes, such as weight gain and
 2 high blood pressure.⁶⁷ Sleep deprivation in youth is also linked to depressive symptoms and
 3 mood.⁶⁸

4 65. Teens who spend five or more hours a day on electronic devices are over 50% more
 5 likely to experience sleep deprivation than youth who spend less than one hour per day.⁶⁹
 6 Defendants exacerbate the disruption of sleep by sending push notifications and emails either at
 7 night when children should be sleeping or during school hours when they should be studying,
 8 thereby prompting children to reengage with Defendants' platforms at times when using them is
 9 harmful to their health and well-being.⁷⁰

10 66. Children are especially at risk of developing harmful behaviors because their
 11 prefrontal cortices are not fully developed.⁷¹ The prefrontal cortex is the part of the brain
 12 implicated in planning complex cognitive behavior, expressing one's personality, making
 13 decisions, and moderating social behavior. Consequently, they find it particularly difficult to
 14 exercise the self-control required to regulate their own use of Defendants' platforms. In this
 15 regard, self-regulation allows people to delay gratification, postponing an immediate reward for a
 16

17 ⁶⁷ *Id.*; see also Jean M. Twenge, PhD. *iGen*. New York: Atria Books (an imprint of Simon &
 18 Schuster), 2017.

19 ⁶⁸ Lynette Vernon, et al., *Tracking Effects of Problematic Social Networking on Adolescent*
 20 *Psychopathy: The Mediating Role of Sleep Disruptions*, Journal of Clinical Child & Adolescent
 21 Psychology (August 2016), https://www.researchgate.net/publication/305925717_Tracking_Effects_of_Problematic_Social_Networking_on_Adolescent_Psychopathology_The_Mediating_Role_of_Sleep_Disruptions.

22 ⁶⁹ Anne Sheehan, *Letter from JANA Partners & CalSTRS to Apple, Inc.*, Harvard Law School
 23 Forum on Corporate Governance (Jan. 19, 2018), <https://corpgov.law.harvard.edu/2018/01/19/joint-shareholder-letter-to-apple-inc/> (citing Jean M. Twenge, PhD. *iGen*. New
 24 York: Atria Books (an imprint of Simon & Schuster), 2017).

25 ⁷⁰ See, e.g., Beatrice Nolan, *Kids are waking up in the night to check their notifications and are*
 26 *losing about 1 night's worth of sleep a week, study suggests*, Bus. Insider (Sept. 19, 2022),
<https://www.businessinsider.com/social-media-costing-children-one-night-sleep-study-2022-9>
 (approximately 12.5% of children report waking up to check social media notifications).

27 ⁷¹ Nino Gugushvili et al., *Facebook use intensity and depressive symptoms: a moderated*
 28 *mediation model of problematic Facebook use, age, neuroticism, and extraversion* at 3, BMC
 Psych. 10, 279 (Nov. 28, 2022), <https://doi.org/10.1186/s40359-022-00990-7>.

1 better reward later. Adolescents' undeveloped capacity for self-regulation means they are
 2 particularly vulnerable to the immediately pleasurable, but ultimately harmful, effects of the
 3 repeated dopamine spikes caused by an external stimulus, such as "likes" that activate the reward
 4 system in the brain.⁷²

5 67. These reward-based learning systems "contribute to the maintenance of excessive
 6 usage patterns."⁷³ Researchers investigating the "directionality between . . . social networking
 7 [platforms] and problematic use" have found that "increases in the intensity of use . . . predict[]
 8 problematic use."⁷⁴ Empirical studies have found that problematic use is associated with
 9 "insomnia, stress, relationship dissatisfaction, anxiety, social anxiety, and depressive
 10 symptoms."⁷⁵

11 68. In this regard, adolescents are especially vulnerable to long-term harm from
 12 Defendants' platforms because excessive and problematic use can disrupt their brains'
 13 development at a critical stage.

14 69. Indeed, studies have shown that the mental health challenges to emotional
 15 regulation and well-being caused by social media use continue on into young adulthood. For
 16 example, a nationally-representative sample of over 1,700 U.S. emerging adults (defined as aged
 17 18-29) found that problematic social media use was associated with depressive symptoms in those
 18 studied.⁷⁶

19 **C. America's Youth Are Facing a Mental Health Crisis**

20 70. The number of young people using Defendants' social media platforms and the
 21 intensity with which they use them has increased significantly since 2008, which has contributed

22 ⁷² *Id.*

23 ⁷³ *Id.*

24 ⁷⁴ *Id.*

25 ⁷⁵ *Id.* (collecting sources).

26 ⁷⁶ Ariel Shensam MA, et al., *Problematic Social Media Use and Depressive Symptoms among*
 27 *U.S. Young Adults: A Nationally-Representative Study*. Soc Sci Med. (Apr. 24, 2017),
 28 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5476225/>.

1 to a wide range of negative effects on youth mental health. The incidence of young people
 2 experiencing depression, contemplating suicide, seeking emergency room help for mental health
 3 issues, and – tragically – committing suicide has skyrocketed.

4 71. On December 7, 2021, these issues led the United States Surgeon General to issue
 5 an advisory on the youth mental health crisis.⁷⁷ In issuing the advisory, the Surgeon General noted:
 6 ““Mental health challenges in children, adolescents, and young adults are real and widespread.
 7 Even before the pandemic, an alarming number of young people struggled with feelings of
 8 helplessness, depression, and thoughts of suicide – and rates have increased over the past
 9 decade.””⁷⁸

10 72. While the report highlights ways in which the COVID-19 pandemic has
 11 exacerbated mental health issues for American youth, it also highlights the mental health
 12 challenges youth faced before the pandemic. Specifically, the report notes that before the
 13 pandemic “mental health challenges were the leading cause of disability and poor life outcomes in
 14 young people.”⁷⁹

15 73. Before the pandemic, one in five children aged 3 to 17 in the United States had a
 16 mental, emotional, developmental, or behavioral disorder.⁸⁰

17 74. In 2021, 42% of high school aged youth “felt so sad or hopeless almost every day
 18 for at least two weeks in a row” that they “stopped doing their usual activities.”⁸¹ Females were
 19

20 ⁷⁷ *Protecting Youth Mental Health: The U.S. Surgeon General’s Advisory*, U.S. Dep’t Health &
 21 Hum. Servs. (Dec. 7, 2021), <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

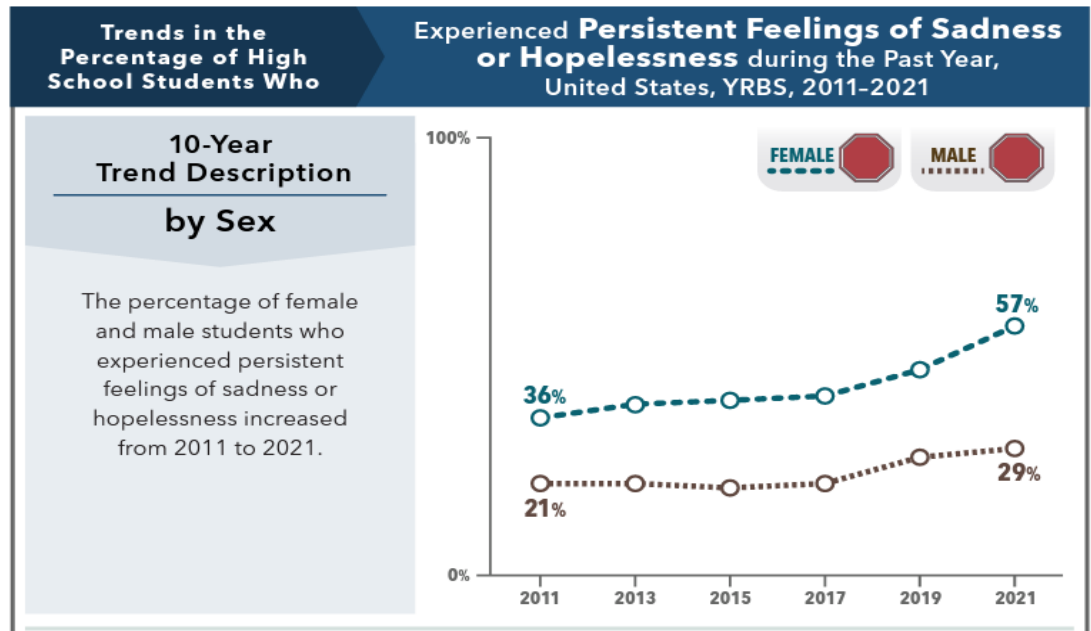
22 ⁷⁸ Press Release, U.S. Dep’t Health & Hum. Servs., *U.S. Surgeon General Issues Advisory on*
 23 *Youth Mental Health Crisis Further Exposed by COVID-19 Pandemic* (Dec. 7, 2021),
 24 <https://www.njsba.org/news-publications/school-board-notes/december-14-2021-vol-xlv-no-18/surgeon-general-warning-mental-health-crisis-for-youth/>.

25 ⁷⁹ *Id.*

26 ⁸⁰ *Id.*

27 ⁸¹ *Youth Risk Behavior Survey: Data Summary & Trends Report* at 60, CDC (Feb. 13, 2023),
 28 https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBS_Data-Summary-Trends_Report2023_508.pdf.

more likely than males to experience these “persistent feelings of sadness or hopelessness.”⁸² From 2011 to 2021, the rate of female high school aged youth who reported persistent feelings of sadness or hopelessness increased from 36% to 51% (to one out of every two female children), and the rate of male high school aged youth increased from 21% to 29%.⁸³



75. The share of children seriously considering attempting suicide increased 11% from 2011 to 2021, up to 22% of all high school students. The share who created a suicide plan increased to 18%.⁸⁴

⁸² *Id.*

⁸³ *Id.* at 60-66.

⁸⁴ Sandy Cohen, *Suicide rate highest among teens and youth adults*, UCLA Health (Mar. 15, 2022), <https://www.uclahealth.org/news/suicide-rate-highest-among-teens-and-young-adults>.

76. From 2007 to 2018, suicide rates among youth aged 10 to 24 in the United States increased by 57%.⁸⁵ By 2018, suicide was the second leading cause of death for youth aged 10 to 24.⁸⁶

77. From 2007 to 2016, emergency room visits for youth aged 5 to 17 rose 117% for anxiety disorders, 44% for mood disorders, and 40% for attention disorders.⁸⁷

78. This and other data led the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association to join the Surgeon General and declare a national emergency in child and adolescent mental health.⁸⁸

79. President Joe Biden also addressed the mental health harms Defendants' platforms have caused to youth in his State of the Union address in 2022, noting that youth were struggling from the harms of social media even before the pandemic.⁸⁹ He called on all to "hold social media platforms accountable for the national experiment they're conducting on our children for profit."⁹⁰

80. California lawmakers are aware of the harmful effects social media platforms have on youth mental health and have begun to respond. On September 22, 2022, Governor Newsom

⁸⁵ *Protecting Youth Mental Health: The U.S. Surgeon General's Advisory*, U.S. Dep't Health & Hum. Servs. (Dec. 7, 2021), <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.

⁸⁶ *AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health*, Am. Acad. Pediatrics (Oct. 19, 2021), <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

⁸⁷ Matt Richtel, *A Teen's Journey Into the Internet's Darkness and Back Again*, N.Y. Times (Aug. 22, 2022), <https://www.nytimes.com/2022/08/22/health/adolescents-mental-health-technology.html>.

⁸⁸ *AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health*, Am. Acad. Pediatrics (Oct. 19, 2021), <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/>.

⁸⁹ President Biden, State of the Union Address (Mar. 1, 2022) (transcript available at <https://www.whitehouse.gov/state-of-the-union-2022/>).

⁹⁰ *Id.*

signed the Age-Appropriate Design Code Act (“AADCA”) into law.⁹¹ This bill is aimed at protecting children under 18 years of age and applies to any website or online service that is likely to be accessed by a child under 18 years of age. The AADCA defines children as consumers who are under 18 years of age, and protects a broader age range than the Federal Children’s Online Privacy Protection Act (“COPPA”), which defines children as individuals under the age of 13. The bill states, “as children spend more of their time interacting with the online world, the impact of the design of online products and services on children’s well-being has become a focus of significant concern.”⁹² The AADCA very likely applies to all Defendants’ social media platforms because the law applies to all online sites “likely to be accessed by children.”⁹³

81. The AADCA requires online businesses with annual revenues of over \$25 million to complete a Data Protection Impact Assessment (“DPIA”) to identify the material risk of new online products, services, or features. These assessments are meant to determine whether the design of an online product, services, or feature could expose children to harm, including “whether algorithms used by the online product, service, or feature could harm children.”⁹⁴

D. Social Media Has Had a Harmful Effect on Schools

82. School districts are uniquely harmed by the current youth mental health crisis. This is because schools are one of the main providers for mental health services for school-aged children.⁹⁵ Indeed, over 3.1 million children aged 12 to 17 received mental health services through an education setting in 2020, more than any other non-specialty mental health service setting.⁹⁶

⁹¹ The California Age-Appropriate Design Code Act, A.B. 2237, 117th Cong. (2022), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2273.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *National Survey on Drug Use and Health*, SAMHSA (see compendium of tables, tables 8.1-8.71 for 1Q20 and 4Q20), <https://www.samhsa.gov/data/report/2020-nsduh-detailed-tables>.

⁹⁶ *Id.*

83. Most schools must now offer mental health services to students. In the 2021-2022 school year, 96% of public schools reported offering at least one type of mental health service to their students.⁹⁷ However, 88% of public schools did not strongly agree that they could effectively provide mental health services to all students in need.⁹⁸ The most common barriers to providing effective mental health services are: (a) insufficient number of mental health professionals; (b) inadequate access to licensed mental health professionals; and (c) inadequate funding.⁹⁹ Student opinions also reflect that schools are unable to provide adequate mental health services. Less than a quarter of students in grades 6 through 12 report accessing counseling or psychological services when they are upset, stressed, or having a problem.¹⁰⁰ Of the students who access mental health services, only 41% of middle schoolers and 36% of high schoolers are satisfied with the services they receive.¹⁰¹

84. In part, schools are struggling to provide adequate mental health services because of the increase in students seeking these services. More than two-thirds of public schools reported a recent increase in the percentage of students seeking mental health services from school.¹⁰²

⁹⁷ *Roughly Half of Public Schools Report That They Can Effectively Provide Mental Health Services to All Students In Need*, Nat'l Ctr. Educ. Stat. (May 31, 2022), https://nces.ed.gov/whatsnew/press_releases/05_31_2022_2.asp.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Insights From the Student Experience, Part I: Emotional and Mental Health* at 2, YouthTruth (2022), https://youthtruthsurvey.org/wp-content/uploads/2022/10/YouthTruth_EMH_102622.pdf.

¹⁰¹ *Id.*

¹⁰² *Roughly Half of Public Schools Report That They Can Effectively Provide Mental Health Services to All Students In Need*, Nat'l Ctr. Educ. Stat. (May 31, 2022), https://nces.ed.gov/whatsnew/press_releases/05_31_2022_2.asp.

85. Also in the last few years, adolescents increased their social media use, also raising levels of excessive and problematic use of digital media.¹⁰³ These higher rates of social media use are related to increased rates of “ill-being.”¹⁰⁴

86. That relationship is reflected in reports from public schools. Over 75% of public schools reported an increase in staff expressing concerns about student depression, anxiety, and other disturbances in the last few years.¹⁰⁵ Students receiving mental health services in educational settings predominantly do so because they “[f]elt depressed,” “[t]hought about killing [themselves] or tried to,” or “[f]elt very afraid and tense.”¹⁰⁶

87. Anxiety disorders are also up, affecting 31.9% of adolescents between the ages of 13 and 18.¹⁰⁷ “Research shows that untreated teenagers with anxiety disorders are at higher risk to perform poorly in school, miss out on important social experiences, and engage in substance abuse.”¹⁰⁸

88. Schools are struggling not only to provide students with mental health services but also to deliver an adequate education because of the youth mental health crisis. Students in grades

¹⁰³ Laura Marciano et al., *Digital Media Use and Adolescents’ Mental Health During the Covid-19 Pandemic: A Systematic Review and Meta-Analysis*, Frontiers Pub. Health (Feb. 1, 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8848548/>.

¹⁰⁴ *Id.*

¹⁰⁵ *Roughly Half of Public Schools Report That They Can Effectively Provide Mental Health Services to All Students In Need*, Nat’l Ctr. Educ. Stat. (May 31, 2022), https://nces.ed.gov/whatsnew/press_releases/05_31_2022_2.asp.

¹⁰⁶ Rachel N. Lipari et al., *Adolescent Mental Health Service Use and Reasons for Using Services in Specialty, Educational, and General Medical Settings*, SAMHSA (May 5, 2016), [https://www.samhsa.gov/data/sites/default/files/report_1973/ShortReport-1973.html#:~:text=The percent20Substance percent20Abuse percent20and percent20Mental,273 percent20TALK percent20\(8255\)](https://www.samhsa.gov/data/sites/default/files/report_1973/ShortReport-1973.html#:~:text=The percent20Substance percent20Abuse percent20and percent20Mental,273 percent20TALK percent20(8255)).

¹⁰⁷ *Anxiety Disorders: Facts and Statistics*, Anxiety & Depression Ass’n Am., <https://adaa.org/understanding-anxiety/facts-statistics> (last visited Feb. 26, 2023).

¹⁰⁸ *Id.*

6 through 12 identify depression, stress, and anxiety as the most prevalent obstacles to learning.¹⁰⁹ Most middle school and high school students also fail to get enough sleep on school nights, which contributes to poor academic performance.¹¹⁰ These negative mental health outcomes are the most common symptoms of excessive social media use.

89. The youth mental health crisis has also caused a wide range of other behavioral issues among students that interfere with schools' ability to teach. In 2022, 61% of public schools saw an increase in classroom disruptions from student misconduct compared to prior years.¹¹¹ Fifty-eight percent of public schools also saw an increase in rowdiness outside of the classroom, 68% saw increases in tardiness, 27% saw increases in students skipping classes, 55% saw increases in the use of electronic devices when not permitted, 37% saw an increase in bullying, 39% saw an increase in physical fights between students, and 46% saw an increase in threats of fights between students.¹¹²

90. Further exacerbating schools' struggles to teach is the fact that students are not showing up to school. Indeed, student absenteeism has greatly increased. In the 2021-2022 school year, 39% of public schools experienced an increase in chronic student absenteeism compared to the 2020-2021 school year, and 72% of public schools saw increased chronic student absenteeism compared to school years before the pandemic.¹¹³ Following suit, vandalism has increased in

¹⁰⁹ *Insights From the Student Experience, Part I: Emotional and Mental Health* at 2-3, YouthTruth (2022), https://youthtruthsurvey.org/wp-content/uploads/2022/10/YouthTruth_EMH_102622.pdf.

¹¹⁰ Anne G. Wheaton et al., *Short Sleep Duration Among Middle School and High School Students-United States, 2015*, 67(3) *Morbidity & Mortality Wkly. Rpt.* 85-90 (Jan. 26, 2018), <http://dx.doi.org/10.15585/mmwr.mm6703a1>.

¹¹¹ *2022 School Pulse Panel*, U.S. Dep't Educ., Inst. Educ. Sci. (2022) (collecting information), <https://ies.ed.gov/schoolsurvey/spp/>.

¹¹² *Id.*

¹¹³ *Id.*

2022, with 36% of public schools reporting increased acts of student vandalism on school property.¹¹⁴

91. School districts have borne increased costs and expenses in response to the youth mental health crisis. These costs include:

- hiring additional mental health personnel (41% of public schools added staff to focus on student mental health);¹¹⁵
- developing additional mental health resources (46% of public schools created or expanded mental health programs for students; 27% added student classes on social, emotional, and mental health; and 25% offered guest speakers for students on mental health);¹¹⁶
- training teachers to help students with their mental health (56% of public schools offered professional development to teachers on helping students with mental health);¹¹⁷
- increasing disciplinary services and hiring additional personnel for disciplinary services in response to increased bullying and harassment over social media;
- addressing property damaged as a result of students acting out because of mental, social, and emotional problems caused by Defendants' conduct;
- diverting time and resources from instructional activities to notify parents and guardians of students' behavioral issues and attendance;
- investigating and responding to threats made against schools and students over social media;
- updating student handbooks to address use of Defendants' platforms; and
- updating school policies to address use of Defendants' platforms.

E. Social Media Has Had a Harmful Effect on Schools in Marin County

92. Marin County public schools have been directly impacted by the mental health crisis among youth in their community.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

93. As students' use of Defendants' platforms has increased, students' mental, emotional, and social health has declined.

94. There has been a surge in the proportion of youth in Marin County public schools who say they cannot stop or control their anxiety, who feel so sad and hopeless that they stop doing the activities that they used to love, who are considering suicide, who made plans to commit suicide, and who have attempted suicide.

95. According to the Public Policy Institute of California, about one-third of California adolescents ages 12-17 experienced serious psychological distress between 2019 and 2021, and adolescent suicide in California has increased 78% from 2012 to 2020, according to statistics collected by the California Department of Public Health.¹¹⁸

96. Mental health surveys conducted by California's Mental Health Services and Accountability Commission in 2020 found that one in three high school students in California reported feeling chronically sad and hopeless.¹¹⁹

97. Another survey conducted by the Centers for Disease Control and Prevention in 2019 found that 45% of high school-aged Californians felt so sad or hopeless every day for two or more weeks in a row that they stopped doing some usual activities.¹²⁰ From that same survey, 26% of students reported that they had seriously considered suicide.¹²¹ Unfortunately, suicide was

¹¹⁸ Shalini Mustala & Paulette Cha, *Investing in Schools to Address Covid-19's Toll on Youth Mental Health*, Public Policy Inst. of California (Dec. 5, 2022), <https://www.ppic.org/blog/investing-in-schools-to-address-covid-19s-toll-on-youth-mental-health/#:~:text=A%20recent%20study%20of%20teen,than%20those%20who%20did%20not>.

¹¹⁹ Mental Health Services Oversight and Accountability Commission, *Every Young Heart and Mind: Schools as Centers of Wellness* (Oct. 7, 2022), https://mhsoac.ca.gov/wp-content/uploads/schools_as_centers_of_wellness_final-2.pdf.

¹²⁰ California Youth Risk Behavior Survey, California 2019 Results, <https://nccd.cdc.gov/youthonline/app/Results.aspx?LID=CA>.

¹²¹ *Id.*

1 the second leading cause of death of children and young people ages 10–24 in California in
2 2020.¹²²

3 98. This crisis has led to a marked increase in the number of Marin County students in
4 need of mental and behavioral health services. In one survey of almost 200 students in a Marin
5 County high school, 90% of students indicated a moderate to high need for mental health
6 support.¹²³ Marin County school officials have witnessed the mental and behavioral health needs
7 of their students skyrocket in relation to use of Defendants' platforms, requiring an increased
8 workload and the need to hire additional staff.

9 99. All public Marin County high schools have experienced the negative impact of
10 social media on students and the school environment. As a result of social media use on
11 Defendants' platforms, Marin County students have made suicide attempts and are experiencing
12 record levels of depression and low self-esteem, abstaining from school at higher rates, and
13 engaging in intensified social conflict. In response, Marin County schools have been forced to
14 hire more mental and behavioral staff and develop new interventions due to the disruptions caused
15 by social media, such as the creation of curricula around socialization skills in interpersonal
16 settings, responses to the cyberbullying that often starts on social media and spills over into the
17 school setting, and protocols to address emergencies that take place on social media and/or are
18 exacerbated through its use.

19 100. Additionally, more students have been acting out as a result of the decline and harm
20 Defendants caused in students' mental, emotional, and social health.

21 101. In many cases behavioral issues in Marin County schools are directly traceable to
22 the impact of Defendants' social media platforms. There is a marked increase in peer conflict and
23 bullying as a result of students' constant use of social media.

24
25 ¹²² *Health of Women and Children*, America's Health Rankings, United Health Foundation
26 (2022), https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/teen_suicide/state/CA.

27 ¹²³ Christina Tejada and Jessica Mendieta, *Marin Voice; Program helps ID students' mental*
28 *health support needs*, Marin Independent Journal (May 14, 2022).

102. A recent set of incidents in Marin County schools involved students shooting projectile gel balls known as “Orbeez” at other students and community members as a direct result of the “Orbeez Challenge” trend on TikTok.¹²⁴ In another set of incidents, Marin County students brought foul-smelling odor sprays into the classroom and disrupted learning environments as part of the “fart spray” challenge on TikTok.

103. Some of the incidents involve threats of violence on or around campus. Officials at Marin County schools have had to address threats against teachers and fellow students made through social media. Nearly all peer conflicts that Marin County school staff address on campus now include social media as a component. In December 2021, Marin County law enforcement increased patrols around Marin County schools in response to a series of TikTok posts threatening school shootings across the county.¹²⁵ In another instance, graffiti containing school shooting threats was found at Redwood High School in Marin County; school officials learned of the graffiti and threats through social media posts.¹²⁶

104. Social media trends have led students in Marin County schools and across the Bay Area to vandalize and destroy school property, such as the “devious lick” challenge on TikTok, a viral trend that resulted in Marin County students vandalizing and otherwise destroying school property.¹²⁷

105. Marin County schools are devoting resources to the mental well-being of their students.¹²⁸ They respond to the crisis at multiple levels within the classroom, addressing the

¹²⁴ Gideon Rubin, *Tik Tok-Inspired ‘Orbeez Challenge’ Incidents Reported in Marin: cops*, Patch (Mar. 30, 2022).

¹²⁵ *Violence warning; Schools in Marin, across nation respond to threats on TikTok*, Marin Independent Journal (Dec. 18, 2021).

¹²⁶ Vince Cestone, *VIDEO: Graffiti found in Marin County high school bathroom stall warns of school shooting Friday*, Kron4 (Sept. 29, 2017).

¹²⁷ See, e.g., Thom Jensen, *Viral ‘Devious Lick’ TikTok Challenge Leaves Bay Area Schools Vandalized* (Sept. 17, 2021), NBC Bay Area, <https://www.nbcbayarea.com/news/local/east-bay/viral-devious-lick-tiktok-challenge-leaves-bay-area-schools-vandalized/2658865/>.

¹²⁸ See, e.g., *Wellness: Marin County Schools*, Marin County Office of Education, <https://www.marinschools.org/Page/8392>; Novato Unified School District, *Wellness*, CPLT FOR VIOLATIONS OF: (1) CAL PUB NUISANCE LAW; (2) CAL UNFAIR COMPETITION LAW; (3) RICO ACT; & (4) NEGLIGENCE & GROSS NEGLIGENCE -

1 disruption to learning caused by social media overuse; in response to social media incidents that
 2 occur outside of school time and impact student well-being; and as social media-related crises
 3 occur, both on and off campus, that require management and mitigation of the impacts on students.
 4 However, they lack sufficient on-campus resources, including appropriate numbers of school-
 5 based mental health professionals, to evaluate the needs of students and address the growing need.

6 106. In an attempt to address the decline in students' mental, emotional, and social
 7 health, Plaintiff's schools have been forced to divert resources and expend additional resources to:

- 8 • hire and contract additional personnel providing mental and behavioral health
 9 services, including clinicians, counselors, wellness coordinators, social workers,
 and medical professionals, to address mental, emotional, and social health issues;
- 10 • develop additional resources to address mental, emotional, and social health issues,
 11 such as a crisis response team to address crises related to or stemming from social
 media incidents, including cyberbullying and suicide risks;
- 12 • create a student wellness ambassador program;¹²⁹
- 13 • increase trainings for teachers and staff to identify students exhibiting symptoms
 14 affecting their mental, emotional, and social health, including a school-based
 15 suicide risk assessment protocol for Marin County schools;¹³⁰
- 16 • train teachers and staff on how to promote healthy social media use and digital
 17 citizenship, including how to manage social media use interfering with classroom
 and learning activities;
- 18 • train parents on how to provide guidance on social media use and healthy digital
 19 citizenship for their children;
- 20 • hire additional personnel to respond to and manage efforts to combat harm caused
 21 by Defendants' platforms, including cyberbullying, violence and vandalism;
- 22 • develop awareness and informational campaigns to educate students about the
 dangers of using Defendants' platforms and healthy social media use;

23
 24 <https://nUSD.org/wellness/>; *Wellness Center Resources on Campus*, San Rafael High School,
<https://sanrafael.srCS.org/wellnesscenter>.

25 ¹²⁹ *Student Wellness Ambassador Program*, Marin County Office of Education,
 26 <https://sites.google.com/marinschools.org/screening/student-events-initiatives/student-wellness-ambassador-program>.

27 ¹³⁰ See, e.g., *A School-Based Suicide Risk Assessment Protocol: Effective July 1, 2022*, Marin
 28 County Office of Education, <https://www.marinschools.org/Page/268>.

- create a Marin County Schools Wellness Collaborative that “meets on a monthly basis to discuss best practices to enhance systems of support for adolescent health, mental health, substance use, and sexual health services within the school setting, including resource sharing and trainings;”¹³¹
- develop trainings, lesson plans, toolkits, books, posters, videos and other materials to teach students about the dangers of using Defendants’ platforms and healthy social media use;
- update teacher, parent, and student handbooks to address use of and harm resulting from social media use during school sessions and when using school-issued technology, including appropriate use of Defendants’ platforms;
- update code of conduct for disciplinary infractions resulting from harm caused by Defendants’ platforms, including cyberbullying and threats made against students and teachers using Defendants’ platforms;
- repair property damaged as a result of the exploitative and harmful content Defendants directed at students;
- increase disciplinary services and time spent addressing cyberbullying, harassment, school disruption, and threats;
- confiscate devices on which students were compelled by Defendants’ conduct to use while in class or on school campuses to access Defendants’ platforms;
- meet with students and the parents of students caught using Defendants’ platforms at school;
- divert time and resources from instructional activities to address student behavioral issues and notify parents and guardians; and
- investigate and respond to threats made against schools and students over social media.

107. Despite all of Plaintiff’s resources, it cannot keep up with the increased need for mental health services because of the youth mental health crisis. Marin County schools struggle with a high vacancy in mental and behavioral health staff positions because there is such a high need for services.

¹³¹ *The Marin Schools Wellness Collaborative*, Wellness: Marin Schools, <https://sites.google.com/marinschools.org/screening/wellness-collaborative>.

1 108. Plaintiff requires significantly greater and long-term funding to address the
2 epidemic Defendants have created. It is time, as President Biden declared, to get “all Americans
3 the mental health services they need.”¹³²

4 **F. Defendants Intentionally Design, Operate, and Market Their Social**
5 **Media Platforms to Addict Youth Users**

6 109. This mental health crisis among America’s youth is the result of Defendants’
7 actions to design and market their social media platforms in such a way as to encourage youth
8 addiction to their platforms, which create harmful experiences for youth.

9 110. Defendants each maintain and operate social media platforms. The interactive
10 features Defendants provide on their platforms are similar in many respects. For example,
11 Facebook, Instagram, Snap, TikTok, and YouTube all offer tailored “feeds” of content curated by
12 complex algorithms intended to learn a user’s interests and ways to publicly express affirmation
13 for such curated content through “likes,” comments, and sharing or reposting the content, which
14 lead to dopamine spikes, which in turn encourage addiction. These methods are so effective in
15 promoting use that Defendants are known to copy the designs and features of one another.¹³³ The
16 salient features of each of Defendants’ social media platforms are described in more detail below.

17 111. Defendants profit from their social media platforms by using them as advertising
18 platforms. Defendants collect data on their users’ viewing habits and behaviors and use that data
19 to sell advertisers access to their youth and other users to allow those companies to promote their
20 products. Advertisers pay a premium to target advertisements to specific categories of users,
21 including youth.

22 112. Defendants view young and even preadolescent users as one of their most valuable
23 commodities as an audience for their advertisements. Young users are central to Defendants’
24 business model and advertising revenue as children are more likely than adults to use social media.

25 ¹³² President Biden, State of the Union Address (Mar. 1, 2022) (transcript available at
26 <https://www.whitehouse.gov/state-of-the-union-2022/>).

27 ¹³³ See, e.g., Kevin Hurler, *For Sites Like Instagram and Twitter, Imitation Is the Only Form of*
28 *Flattery*, Gizmodo (Aug. 16, 2022), <https://gizmodo.com/instagram-tiktok-snapchat-facebook-meta-1849395419>.

Indeed, 95% of children aged 13 to 17 have cell phones,¹³⁴ 90% use social media,¹³⁵ and 28% buy products and services through social media.¹³⁶

113. To profit from these young users, Defendants intentionally market their platforms to children and teens. For children under 13, the Children’s Online Privacy Protection Act of 1998 (“COPPA”)¹³⁷ regulates the conditions under which platforms like Defendants’ can collect and use their information.

114. COPPA requires platforms that either target children under age 13 or have actual knowledge of users under age 13 to obtain “verifiable parental consent” prior to collecting and using information about them.¹³⁸ Defendants have blatantly violated COPPA or turned a blind eye to younger users on their platforms by leaving users to self-report their age. More recently, Defendants embarked on a bolder strategy and sought to capture preadolescent audiences by offering “kid versions” of their platforms that, while not collecting and using their information, are reportedly “designed to fuel [children’s] interest in the grown-up version.”¹³⁹

115. To maximize revenue, Defendants have intentionally designed and operated their platforms to maximize users’ screen time. Defendants have done so by building features and operating their platforms in a manner intended to exploit human psychology using complex algorithms driven by advanced artificial intelligence (“AI”) and machine-learning systems. As

¹³⁴ Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

¹³⁵ *Social Media and Teens*, Am. Acad. Child & Adolescent Psychiatry (Mar. 2018), https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx.

¹³⁶ Erinn E. Murphy et al., *Taking Stock with Teens: 21 Years of Researching U.S. Teens GenZ Insights at 13*, Piper Sandler (Fall 2021), https://piper2.bluematrix.com/docs/pdf/3bad99c6-e44a-4424-8fb1-0e3adfcdbd1d4.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosam&stream=top.

¹³⁷ See 15 U.S.C. §§6501-6506.

¹³⁸ *Id.*

¹³⁹ Leonard Sax, *Is TikTok Dangerous for Teens?*, Inst. for Fam. Stud. (Mar. 29, 2022), <https://ifstudies.org/blog/is-tiktok-dangerous-for-teens->.

1 stated by Catheryn O’Neil, Ph.D., Harvard mathematician and data scientist, “algorithms are
 2 opinions embedded in code . . . algorithms are not objective. Algorithms are optimized to some
 3 definition of success. So, if you can imagine, if . . . a commercial enterprise builds an algorithm
 4 to their definition of success, it’s a commercial interest. It’s usually profit.”¹⁴⁰ In this regard, in
 5 the name of profit, Defendants have progressively modified their platforms in ways that promote
 6 excessive and problematic use and have done so in ways known to be harmful to children.

7 116. One way Defendants maximize the time users spend on their platforms involves the
 8 design of feeds – whether of photos, videos, or sponsored or promoted content. Each uses
 9 algorithms to serve users personalized content for them to consume *ad nauseam*. Google’s former
 10 design ethicist, Tristan Harris (“Harris”), explained that this never-ending stream is designed to
 11 “keep [users] scrolling, and purposely eliminate any reason for [them] to pause, reconsider or
 12 leave.”¹⁴¹ Defendants’ feeds take “an experience that was bounded and finite, and turn it into a
 13 bottomless flow that keeps going.”¹⁴² This “flow state,” as psychologists describe it, “fully
 14 immerse[s]” users, distorts their perception of time, and “has been shown to be associated with
 15 problematic use of social networking sites.”¹⁴³ As Harris further states:

16 *[W]e’ve moved away from having a tools-based technology environment to an*
 17 *addiction- and manipulation-based technology environment. . . . Social media*
 18 *isn’t a tool that’s just waiting to be used. It has its own goals, and it has its own*
 19 *means of pursuing them by using your psychology against you.*¹⁴⁴

20
 21 ¹⁴⁰ *The Social Dilemma – 2020 Transcript*, Scraps from the Loft (Oct. 3, 2020),
<https://scrapsfromtheloft.com/movies/the-social-dilemma-movie-transcript/>.

22 ¹⁴¹ Von Tristan Harris, *The Slot Machine in Your Pocket*, Spiegel Int’l (July 27, 2016),
 23 <https://www.spiegel.de/international/zeitgeist/smartphone-addiction-is-part-of-the-design-a-1104237.html>.

24 ¹⁴² *Id.*

25 ¹⁴³ Nino Gugushvili et al., *Facebook use intensity and depressive symptoms: a moderated*
 26 *mediation model of problematic Facebook use, age, neuroticism, and extraversion* at 3, BMC
 Psych. 10, 279 (Nov. 28, 2022), <https://doi.org/10.1186/s40359-022-00990-7>.

27 ¹⁴⁴ *The Social Dilemma – 2020 Transcript*, Scraps from the Loft (Oct. 3, 2020),
 28 <https://scrapsfromtheloft.com/movies/the-social-dilemma-movie-transcript/>.

117. A second way social media platforms manipulate users, particularly young ones, is through social reciprocity. “Reciprocity,” from a psychology perspective, refers to the powerful social phenomenon of how people respond to positive or, conversely, hostile actions. Reciprocity means that in response to friendly actions, people respond in a friendly manner and vice versa.¹⁴⁵ Phillip Kunz (“Kunz”) best illustrated the automatic nature of reciprocity through his Christmas card experiment. In the experiment, Kunz sent a group of complete strangers holiday cards with pictures of his family and included a brief note.¹⁴⁶ Those people, whom he had never met or communicated with before, reciprocated, flooding him with holiday cards.¹⁴⁷ The majority of the responses did not even ask Kunz who he was.¹⁴⁸ They simply responded to his initial gesture with a reciprocal action.

118. Reciprocity is why Facebook and Snapchat automatically tell a “sender when you ‘saw’ their message, instead of letting you avoid disclosing whether you read it. As a consequence, you feel more obligated to respond” immediately.¹⁴⁹ That keeps users on the platform longer. Another tactic, push notifications, make users feel psychologically compelled to return to the platform.

119. A third way Defendants manipulate users to keep using or coming back to their platforms is through the use of IVRs. Slot machines are a frequent example of how IVRs work.¹⁵⁰

¹⁴⁵ Ernst Fehr & Simon Gächter, *Fairness and Retaliation: The Economics of Reciprocity*, 14(3) J. Econ. Persps. 159-81 (Mar. 2000), https://www.researchgate.net/profile/Ernst-Fehr-2/publication/23756527_Fairness_and_Retaliation_The_Economics_of_Reciprocity/links/5eb024e945851592d6b87d3b/Fairness-and-Retaliation-The-Economics-of-Reciprocity.pdf.

¹⁴⁶ Phillip R. Kunz & Michael Woolcott, *Season’s Greetings: From my status to yours*, 5(3) Soc. Sci. Rsch. 269-78 (Sept. 1976), [https://doi.org/10.1016/0049-089X\(76\)90003-X](https://doi.org/10.1016/0049-089X(76)90003-X).

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ Von Tristan Harris, *The Slot Machine in Your Pocket*, Spiegel Int’l (July 27, 2016), <https://www.spiegel.de/international/zeitgeist/smartphone-addiction-is-part-of-the-design-a-1104237.html>.

¹⁵⁰ See, e.g., Julian Morgans, *The Secret Ways Social Media is Built for Addiction*, Vice (May 17, 2017), <https://www.vice.com/en/article/vv5jkb/the-secret-ways-social-media-is-built-for-addiction>.

1 Users pull a lever to win a prize. With each pull, the user may or may not win a prize (*i.e.*, an
2 intermittent reward that varies in value).

3 120. IVRs work by spacing out dopamine triggering stimuli with dopamine gaps,
4 allowing for anticipation and craving to develop, which strengthens the desire to engage in the
5 activity with each release of dopamine.

6 121. Defendants bake IVRs into the design and operations of their respective platforms
7 by “link[ing] a user’s action (like pulling a lever) with a variable reward.”¹⁵¹ For example, when
8 “we swipe down our finger to scroll the Instagram feed, we’re playing a slot machine to see what
9 photo comes next.”¹⁵² Facebook also delays the time it takes to load the feed. “This is because
10 without that three-second delay, Instagram wouldn’t feel variable.”¹⁵³ Without that delay, there
11 would be no time for users’ anticipation to build. In slot machine terms, there would be “no sense
12 of *will I win?* because you’d know instantly. So the delay isn’t the app loading. It’s the cogs
13 spinning on the slot machine.”¹⁵⁴ Each of Defendants’ platforms exploits this biochemical reaction
14 among its users, typically using “likes,” “hearts,” or other forms of approval that serve as the
15 reward.

16 122. Youth are especially vulnerable both to the ways in which Defendants manipulate
17 users to maximize their “watch time” and to the resulting harms. Children’s brains undergo a
18 fundamental shift around age 10 that makes “preteens extra sensitive to attention and admiration
19 from others.”¹⁵⁵ Consequently, Defendants’ use of IVRs, reciprocity, and other “rewards” to
20 maximize the time users spend on their platforms exploits a vulnerability unique to youth. This

21
22 ¹⁵¹ Von Tristan Harris, *The Slot Machine in Your Pocket*, Spiegel Int’l (July 27, 2016),
23 <https://www.spiegel.de/international/zeitgeist/smartphone-addiction-is-part-of-the-design-a-1104237.html>.

24 ¹⁵² *Id.* (emphasis in original).

25 ¹⁵³ Julian Morgans, *The Secret Ways Social Media is Built for Addiction*, Vice (May 17, 2017),
<https://www.vice.com/en/article/vv5jkb/the-secret-ways-social-media-is-built-for-addiction>.

26 ¹⁵⁴ *Id.* (emphasis in original).

27 ¹⁵⁵ Zara Abrams, *Why young brains are especially vulnerable to social media*, Am. Psych. Ass’n
28 (Aug. 25, 2022), <https://www.apa.org/news/apa/2022/social-media-children-teens>.

1 “extra sensitivity” also puts them at greater risk. As Tristan Harris, Google’s former design ethicist
 2 acknowledged: “Everyone innately responds to social approval, but some demographics, in
 3 particular teenagers, are more vulnerable to it than others.”¹⁵⁶

4 123. In adolescence, the structures of the brain that are “‘closely tied’” to social media
 5 activity and that drive instinctual behavior begin to change.¹⁵⁷ The ventral striatum is one of those
 6 structures. It receives a rush of dopamine and oxytocin, known as the “‘happy hormones,’”
 7 whenever we experience social rewards.¹⁵⁸ Between the ages of 10 and 12, the receptors for those
 8 happy hormones begin to multiply in this region of the brain, which makes compliments on a new
 9 hairstyle, laughter from a classmate, or other social rewards “start to feel a lot more satisfying.”¹⁵⁹

10 124. Historically, these biological changes incentivized children and teens to develop
 11 healthy social skills and connections. “But arriving at school in a new pair of designer jeans,
 12 hoping your crush will smile at you in the hallway, is worlds away from posting a video on TikTok
 13 that may get thousands of views and likes,” according to Mitch Prinstein (“Prinstein”), Chief
 14 Science Officer for the American Psychology Association.¹⁶⁰

15 125. Part of what makes the “interactions so different”¹⁶¹ is that they are often permanent
 16 and public in nature. There is no public ledger tracking the number of consecutive days you have
 17 spoken to someone like there is for Snap “streaks.” Similarly, “[a]fter you walk away from a
 18 regular conversation, you don’t know if the other person liked it, or if anyone else liked it.”¹⁶²

20 ¹⁵⁶ Von Tristan Harris, *The Slot Machine in Your Pocket*, Spiegel Int’l (July 27, 2016),
 21 <https://www.spiegel.de/international/zeitgeist/smartphone-addiction-is-part-of-the-design-a-1104237.html>.

22 ¹⁵⁷ *Id.*

23 ¹⁵⁸ *Id.*

24 ¹⁵⁹ *Id.*

25 ¹⁶⁰ Zara Abrams, *Why young brains are especially vulnerable to social media*, Am. Psych. Ass’n
 26 (Aug. 25, 2022), <https://www.apa.org/news/apa/2022/social-media-children-teens>.

27 ¹⁶¹ *Id.*

28 ¹⁶² *Id.*

1 Conversely, on Defendants’ platforms, children, their friends, and even complete strangers can
 2 publicly deliver or withhold social rewards in the form of likes, comments, views, and follows.¹⁶³

3 126. These social rewards release dopamine and oxytocin in the brains of youth and
 4 adults alike; but there are two key differences, as Prinstein explained: “First, adults tend to have a
 5 fixed sense of self that relies less on feedback from peers. Second, adults have a more mature
 6 prefrontal cortex, an area that can help regulate emotional responses to social rewards.”¹⁶⁴

7 127. Adolescents, by contrast, are in a “period of personal and social identity formation,”
 8 much of which “is now reliant on social media. Due to their limited capacity for self-regulation
 9 and their vulnerability to peer pressure,” adolescents “are at greater risk of developing mental
 10 disorder.”¹⁶⁵

11 128. Together, Defendants have designed, refined, marketed, and operated their social
 12 media platforms to maximize the number of youth who use their platforms and the time they spend
 13 on those platforms. Despite knowing that social media inflicts harm on youth, Defendants have
 14 continued to create more sophisticated versions of their platforms with features designed to keep
 15 users engaged and maximize the amount of time they spend using social media.

16 129. Defendants’ efforts have proven wildly successful. Defendants’ conduct in
 17 designing and marketing exploitative and manipulative platforms has resulted in youth spending
 18 excessive amounts of time on Defendants’ platforms. The majority of teenagers use the same five
 19
 20
 21
 22

23 ¹⁶³ *Id.*

24 ¹⁶⁴ *Id.*

25 ¹⁶⁵ Betul Keles et al., *A systematic review: the influence of social media on depression, anxiety*
 26 *and psychological distress in adolescents*, Int’l J. Adolescence & Youth (Mar. 3, 2019),
 27 [https://www.researchgate.net/publication/331947590_A_systematic_review_the_influence_of_social_media_on_d](https://www.researchgate.net/publication/331947590_A_systematic_review_the_influence_of_social_media_on_depression_anxiety_and_psychological_distress_in_adolescents/fulltext/5c94432345851506d7223822/A-systematic-review-the-influence-of-social-media-on-depression-anxiety-and-psychological-distress-in-adolescents.pdf)
 28 [epression_anxiety_and_psychological_distress_in_adolescents/fulltext/5c94432345851506d7223822/A-systematic-review-the-influence-of-social-media-on-depression-anxiety-and-psychological-distress-in-adolescents.pdf](https://www.researchgate.net/publication/331947590_A_systematic_review_the_influence_of_social_media_on_depression_anxiety_and_psychological_distress_in_adolescents/fulltext/5c94432345851506d7223822/A-systematic-review-the-influence-of-social-media-on-depression-anxiety-and-psychological-distress-in-adolescents.pdf).

1 social media platforms: YouTube, TikTok, Instagram, Snapchat, and Facebook.¹⁶⁶ Each of these
2 platforms individually boasts high numbers of teenage users.

3 **G. Facebook and Instagram Have Substantially Contributed to the**
4 **Youth Mental Health Crisis**

5 **1. The Facebook Platform**

6 130. Facebook is a social networking platform owned by Meta.

7 131. Facebook was founded in 2004 and has become the largest social network in the
8 world. As of October 2021, Facebook had approximately 2.9 billion monthly active users,
9 approximately 2 billion of whom use Facebook every day.¹⁶⁷

10 132. When Facebook was founded in 2004, only students at certain colleges and
11 universities could use the social media platform, and verification of college enrollment was
12 required to access Facebook.

13 133. In 2005, Facebook expanded and became accessible to students at more universities
14 around the world, after which Facebook launched a high school version that also required an
15 invitation to join.

16 134. Facebook later expanded eligibility to employees of several companies, including
17 Apple and Microsoft, and also added more universities to its network.

18 135. In September 2006, Facebook became available to all internet users. At the time,
19 Facebook claimed that it was open only to persons aged 13 and older with a valid email address;
20 however, on information and belief, Facebook did not in fact require verification of a user's age
21 or identity and did not actually verify users' email addresses, such that underage users could easily
22 register an account with and access Facebook.

23
24
25 ¹⁶⁶ Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10,
26 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

27 ¹⁶⁷ See *id.*; Stacy Jo Dixon, *Number of Daily Active Facebook Users Worldwide as of 4th Quarter*
28 *2022 (in Millions)*, Statista (Feb. 13, 2023), <https://www.statista.com/statistics/346167/facebook-global-dau/>.

136. Facebook then underwent a series of changes aimed at increasing user engagement and platform growth, without regard to user safety, including the following changes:

- In 2009, Facebook launched the “like” button;
- In 2011, Facebook launched Messenger, its direct messaging service, and started allowing people to subscribe to non-friends;
- In 2012, Facebook started showing advertisements in its newsfeed and launched a real-time bidding system through which advertisers could bid on users based on their visits to third-party websites;
- In 2014, Facebook’s facial recognition algorithm (DeepFace) reached near-human accuracy in identifying faces;
- In 2015, Facebook made significant changes to its newsfeed algorithm to determine what content to show users and launched its live-streaming service;
- In 2016, Facebook launched games for its social media platform so that users could play games without having to install new apps; and
- In 2017, Facebook launched Facebook Creator, an app for mobile video posts that assists with content creation.

2. The Instagram Platform

137. Instagram is a social media platform that launched in 2010, which Meta acquired for \$1 billion in April 2012.

138. Instagram enables users to share photos and videos with other users and view other users’ photos and videos. These photos and videos appear on users’ Instagram “feeds,” which are virtually bottomless, scrollable lists of content.

139. After being acquired by Meta, Instagram experienced exponential user growth, expanding from approximately ten million monthly active users in September 2012 to more than one billion monthly active users worldwide today, including approximately 160 million users in the United States.¹⁶⁸

¹⁶⁸ Stacy Jo Dixon, *Number of Instagram Users Worldwide from 2020 to 2025 (in Billions)*, Statista (Feb. 15, 2023), <https://www.statista.com/statistics/183585/instagram-number-of-global-users/>.

140. Instagram’s user growth was driven by design and development changes to the Instagram platform that increased engagement at the expense of the health and well-being of Instagram’s users – especially the children using the platform.

141. For example, in August 2020, Instagram began hosting and recommending short videos to users, called Reels.¹⁶⁹ Like TikTok, Instagram allows users to view an endless feed of Reels that are recommended and curated to users by Instagram’s algorithm.

142. Instagram has become the most popular photo-sharing social media platform among children in the United States – approximately 72% of children aged 13 to 17 in the United States use Instagram.¹⁷⁰

3. Facebook and Instagram Design and Market Their Platforms to Appeal to a Youth Audience

143. Facebook and Instagram have expended significant effort to attract youth, including teens and preteens, to their platforms, including designing features that appeal to them. They do this to maximize the revenue generated from relationships with advertisers and also because they view teenagers as a way to attract other potential users, such as by using teenagers to recruit parents who want to participate in their children’s lives, as well as younger siblings who look to older siblings as models for which social media platforms to use and how to use them.¹⁷¹

144. Facebook and Instagram explicitly target teenagers. An internal Instagram marketing plan reveals that it knows “[i]f we lose the teen foothold in the U.S. we lose the

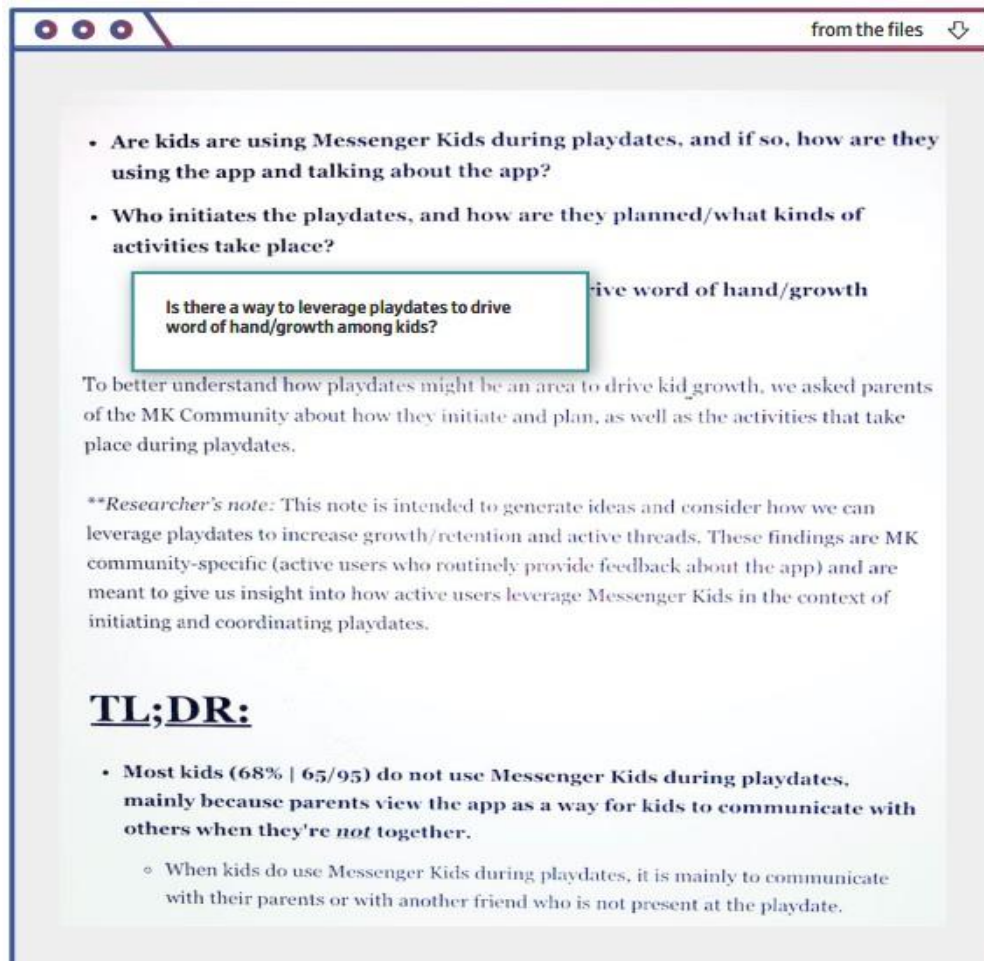
¹⁶⁹ *Introducing Instagram Reels*, Instagram (Aug. 5, 2020), <https://about.instagram.com/blog/announcements/introducing-instagram-reels-announcement>.

¹⁷⁰ Katherine Schaeffer, *7 Facts About Americans and Instagram*, Pew Rsch. Ctr. (Oct. 7, 2021), <https://www.pewresearch.org/fact-tank/2021/10/07/7-facts-about-americans-and-instagram/>.

¹⁷¹ Sheera Frenkel et al., *Instagram Struggles with Fears of Losing Its ‘Pipeline’: Young Users*, N.Y. Times (Oct. 26, 2021), <https://www.nytimes.com/2021/10/16/technology/instagram-teens.html>.

pipeline” for growth.¹⁷² To ensure that did not happen, Instagram devoted almost all of its \$390 million annual marketing budget for 2018 to target teenagers.¹⁷³

145. Facebook also views preteens or “tweens” as a “valuable but untapped audience,” even contemplating “[e]xploring playdates as a growth lever.”¹⁷⁴ Facebook formed a team to study preteens, endeavored to create more products designed for them, and commissioned strategy papers regarding the “business opportunities” created.¹⁷⁵

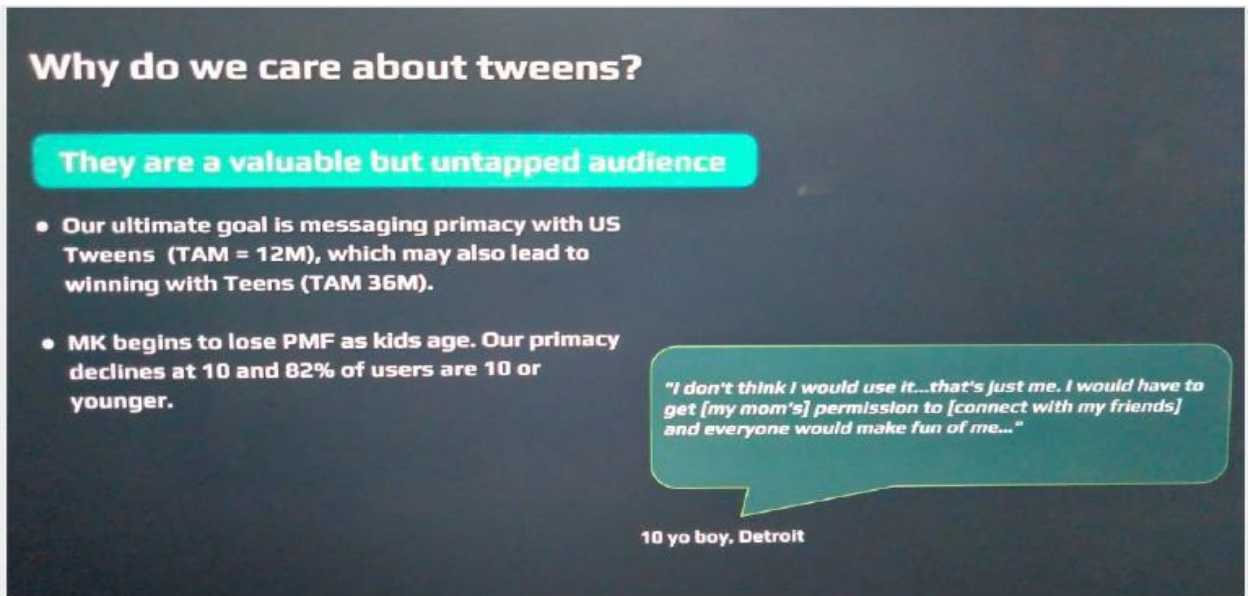


¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ Georgia Wells & Jeff Horwitz, *Facebook's Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show; It has investigated how to engage young users in response to competition from Snapchat, TikTok; 'Exploring playdates as a growth lever,'* Wall St. J. (Sept. 28, 2021), <https://www.wsj.com/articles/facebook-instagram-kids-tweens-attract-11632849667>.

¹⁷⁵ *Id.*



146. For these reasons, Facebook and Instagram are designed to be used by children and are actively marketed to children throughout their markets in the United States. Facebook and Instagram both advertise to children through their own efforts, as well as through advertisers that create and target advertisements to children. Internal company documents establish that Facebook spends hundreds of millions of dollars researching, analyzing, and marketing to children to find ways to make its platforms more appealing to these age groups and to maximize the time they spend on its platforms as these age groups are seen as essential to Facebook’s long-term profitability and market dominance.¹⁷⁶ For instance, after Instagram’s founders left in September 2018, “Facebook went all out to turn Instagram into a main attraction for young audiences” and “began concentrating on the ‘teen time spent’ data point” in order to “drive up the amount of time that teenagers were on the app with features including Instagram Live, a broadcasting tool, and Instagram TV, where people upload videos that run as long as an hour.”¹⁷⁷

¹⁷⁶ *Id.*

¹⁷⁷ Sheera Frenkel et al., *Instagram Struggles with Fears of Losing Its ‘Pipeline’: Young Users*, N.Y. Times (Oct. 26, 2021), <https://www.nytimes.com/2021/10/16/technology/instagram-teens.html>.

147. Similarly, Instagram’s popularity among young people is the result of its deliberate efforts to target children, which in turn is driven by the desire of advertisers and marketers to target children on the Facebook and Instagram platforms. In fact, Facebook’s acquisition of Instagram was primarily motivated by its desire to make up for declines in the use of Facebook by children and its view of Instagram as central to its ability to attract and retain young audiences. A 2018 internal Facebook marketing report is indicative of this, lamenting the loss of teenage users to competitors’ platforms as ““an existential threat.””¹⁷⁸ In contrast, a Facebook presentation from 2019 indicated that ““Instagram is well positioned to resonate and win with young people,”” and ““[t]here is a path to growth if Instagram can continue their trajectory.””¹⁷⁹

148. With respect to preteens, Facebook’s policy is that they cannot register an account on either Facebook or Instagram, but it knowingly lacks effective age-verification protocols. Since at least 2011, Facebook has known that its age-verification protocols are largely inadequate, acknowledging that at least tens of thousands of children under age 13 were using Facebook every day.¹⁸⁰ In 2021, Adam Mosseri, the executive in charge of Instagram, acknowledged users under 13 can still ““lie about [their] age now”” to register an account.¹⁸¹

149. Facebook has yet to implement protocols to verify a user’s age, presumably because it has strong business incentives not to do so or to laxly enforce its policy. Facebook also has agreements with cell phone manufacturers and/or providers and/or retailers, who often preinstall its platforms on mobile devices prior to sale without regard to the age of the intended user of each

¹⁷⁸ *Id.*

¹⁷⁹ Georgia Wells et al., *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show; Its own in-depth research shows a significant teen mental-health issue that Facebook plays down in public*, Wall St. J. (Sept. 14, 2021), <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

¹⁸⁰ Austin Carr, *Facebook Booting “20,000” Underage Users Per Day: Reaction to Growing Privacy Concerns?*, Fast Co. (Mar. 22, 2011), <https://www.fastcompany.com/1741875/facebook-booting-20000-underage-users-day-reaction-growing-privacy-concerns>.

¹⁸¹ Georgia Wells & Jeff Horwitz, *Facebook’s Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show; It has investigated how to engage young users in response to competition from Snapchat, TikTok; ‘Exploring playdates as a growth lever,’* Wall St. J. (Sept. 28, 2021), <https://www.wsj.com/articles/facebook-instagram-kids-tweens-attract-11632849667>.

1 such device. That is, even though Facebook is prohibited from providing its platforms to users
 2 under the age of 13, Facebook actively promotes and provides underage users access to its
 3 platforms by encouraging and allowing cell phone manufacturers to preinstall the platforms on
 4 mobile devices indiscriminately. Consequently, in a recent Pew Research study, approximately
 5 11% of United States parents of children between the ages of 9 and 11 said their children used
 6 Instagram in 2020¹⁸² despite Facebook claiming to remove approximately 600,000 underage users
 7 per quarter.¹⁸³

8 150. Facebook's efforts to attract young users have been successful. In a recent study,
 9 62% of children aged 13 to 17 reported they have used Instagram's app, and 32% of children aged
 10 13 to 17 reported they have used Facebook's app or website.¹⁸⁴

11 **4. Facebook and Instagram Intentionally Design Exploitative**
 12 **Features Aimed at Keeping Users on the Platforms for as Long**
as Possible

13 151. The Facebook platforms are designed to maximize user engagement, using features
 14 that exploit the natural human desire for social interaction and the neurophysiology of the brain's
 15 reward systems to keep users endlessly scrolling, posting, "liking," commenting, and counting the
 16 number of "likes" and comments to their own posts. The developing brains of children are
 17 particularly vulnerable to such exploitation.

18 152. One of the ways in which Facebook and Instagram employ IVRs is through its push
 19 notifications and emails, which encourage habitual use and are designed to prompt users to open
 20 and be exposed to content selected to maximize the use of the Facebook platforms and the ads run
 21 on them. In particular, Facebook and Instagram space out notifications of likes and comments into

22
 23 ¹⁸² Brooke Auxier et al., *Parenting Children in the Age of Screens*, Pew Rsch. Ctr. (July 28, 2020),
 24 <https://www.pewresearch.org/internet/2020/07/28/childrens-engagement-with-digital-devices-screen-time/>.

25 ¹⁸³ Georgia Wells & Jeff Horwitz, *Facebook's Effort to Attract Preteens Goes Beyond Instagram*
 26 *Kids, Documents Show; It has investigated how to engage young users in response to competition*
from Snapchat, TikTok; 'Exploring playdates as a growth lever,' Wall St. J. (Sept. 28, 2021),
<https://www.wsj.com/articles/facebook-instagram-kids-tweens-attract-11632849667>.

27 ¹⁸⁴ Heather Kelly, *Teens have fled Facebook but are loyal to YouTube, poll shows*, Wash. Post
 28 (Aug. 10, 2022), <https://www.washingtonpost.com/technology/2022/08/10/teens-social-pew/>.

1 multiple bursts rather than notifying users in real time so as to create dopamine gaps that leave
2 users craving in anticipation for more. In this regard, Facebook’s push notifications and emails
3 are specifically designed to manipulate users into reengaging with the Facebook platforms to
4 increase user engagement regardless of a user’s health or well-being.

5 153. Facebook also exploits IVRs to manipulate users with one of its most defining
6 features: the “Like” button. Facebook knows “Likes” are a source of social comparison harm for
7 many users as detailed below. Several Facebook employees involved in creating the Like button
8 have since left Facebook and have spoken publicly about the manipulative nature of the Facebook
9 platforms and the harm they cause users.¹⁸⁵

10 154. Additionally, Facebook designed other features of its platforms on principles of
11 IVRs, such as posts, comments, tagging, and the “pull to refresh” feature (which is similar to the
12 way that slot machines work).

13 155. Other design decisions were motivated by reciprocity, such as the use of visual cues
14 to reflect that someone is currently writing a message (a feature designed to keep a user on the
15 platform until they receive the message) and alerting users when a recipient has read their message
16 (which encourages the recipient to respond and return to the platform to check for a response).

17 156. Facebook and Instagram are designed to encourage users to post content and to like,
18 comment, and interact with other users’ posts. Each new post that appears on a user’s feed
19 functions as a dopamine-producing social interaction in the user’s brain. Similarly, likes,
20 comments, and other interactions with users’ posts function as an even stronger dopamine-
21 producing stimulus than does seeing new posts from other users. This in turn drives users to
22 generate content they expect will generate many likes and comments. In this regard, Facebook
23 has designed its platforms to function in concert as popular content posted by other users

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27 ¹⁸⁵ See, e.g., Paul Lewis, *‘Our minds can be hijacked’: the tech insiders who fear a smartphone*
28 *dystopia*, Guardian (Oct. 6, 2017), <https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia>.

1 psychologically compels users to post similar content themselves, trapping users – especially youth
 2 – in endless cycles of ““little dopamine loops.””¹⁸⁶

3 **5. Facebook’s and Instagram’s Algorithms Are Manipulative and** 4 **Harmful**

5 157. Facebook and Instagram also employ advanced computer algorithms and AI to
 6 make the platforms as engaging and habit forming as possible for users. For example, Facebook
 7 and Instagram display curated content and employ recommendations that are customized to each
 8 user by using sophisticated algorithms. The proprietary services developed through such
 9 algorithms include Facebook’s Feed (a newsfeed of stories and posts published on the platform,
 10 some of which are posted by connections and others that are suggested by Facebook’s algorithms),
 11 People You May Know (algorithm-based suggestions of persons with common connections or
 12 background), Suggested for You, Groups You Should Join, and Discover (algorithm-based
 13 recommendations of groups). Such algorithm-based content and recommendations are pushed to
 14 each user in a steady stream as the user navigates the platform, as well as through notifications
 15 sent to the user’s smartphone and email addresses when the user is disengaged with the platform.

16 158. These algorithms are not based exclusively on user requests or even user inputs.
 17 The algorithms combine information entered or posted by the user on the platform with the user’s
 18 demographics and other data points collected and synthesized by Facebook, make assumptions
 19 about that user’s interests and preferences, make predictions about what else might appeal to the
 20 user, and then make very specific recommendations of posts and pages to view and groups to visit
 21 and join based on rankings that will optimize Facebook’s key performance indicators. In this
 22 regard, Facebook’s design dictates the way content is presented, such as its ranking and
 23 prioritization.¹⁸⁷

24
 25 ¹⁸⁶ Allison Slater Tate, *Facebook whistleblower Frances Haugen says parents make 1 big mistake*
 26 *with social media*, Today (Feb. 7, 2022), <https://www.today.com/parents/teens/facebook-whistleblower-frances-haugen-rcna15256>.

27 ¹⁸⁷ See, e.g., Adam Mosseri, *Shedding More Light on How Instagram Works*, Instagram (June 8,
 28 2021), <https://about.instagram.com/blog/announcements/shedding-more-light-on-how-instagram-works>.

1 159. Facebook’s and Instagram’s current use of algorithms in their platforms is driven
2 and designed to maximize user engagement. Over time, Facebook and Instagram have gradually
3 transitioned away from chronological ranking, which organized the interfaces according to when
4 content was posted or sent, to prioritize Meaningful Social Interactions (“MSI”), which
5 emphasizes users’ connections and interactions such as likes and comments and gives greater
6 significance to the interactions of connections that appeared to be the closest to users. Facebook
7 thus developed and employed an “amplification algorithm” to execute engagement-based ranking,
8 which considers a post’s likes, shares, and comments, as well as a respective user’s past
9 interactions with similar content, and exhibits the post in the user’s newsfeed if it otherwise meets
10 certain benchmarks.

11 160. Facebook’s algorithms covertly operate on the principle that intense reactions
12 invariably compel attention. Because these algorithms measure reactions and contemporaneously
13 immerse users in the most reactive content, these algorithms effectively work to steer users toward
14 the most negative content because negative content routinely elicits passionate reactions.

15 161. Due to its focus on user engagement, Facebook’s algorithms promote content that
16 is objectionable and harmful to many users. As set forth in greater detail below, Facebook was
17 well aware of the harmful content it was promoting but failed to change its algorithms because the
18 inflammatory content its algorithms were feeding to users fueled their return to the platforms and
19 led to more engagement, which in turn helped Facebook and Instagram sell more advertisements
20 that generate most of their revenue. As such, Facebook’s algorithms promote harmful content
21 because such content increases user engagement, which thereby increases its appeal to advertisers
22 and increases its overall value and profitability.

23 162. Facebook’s and Instagram’s shift from chronological ranking to algorithm-driven
24 content and recommendations has changed the platforms in ways that are profoundly dangerous
25 and harmful to children, whose psychological susceptibility to habit-forming platforms put them
26 at great risk of harm from the platforms’ exploitative and harmful features. In this regard, the
27 algorithms used by these platforms exploit child users’ diminished decision-making capacity,
28 impulse control, emotional maturity, and psychological resiliency caused by users’ incomplete

1 brain development, and Facebook and Instagram specifically design their platforms with these
2 vulnerabilities in mind.

3 **6. Facebook and Instagram “Feeds” Are Designed to Enable**
4 **Users to Scroll Endlessly**

5 163. Both Facebook and Instagram show each user a “feed” that is generated by an
6 algorithm for that user, which consists of a series of photos and videos posted by accounts that the
7 user follows, along with advertising and content specifically selected and promoted by the
8 company.

9 164. These feeds are virtually bottomless lists of content that enable users to scroll
10 endlessly without any natural end points that would otherwise encourage them to move on to other
11 activities. In this regard, “[u]nlike a magazine, television show, or video game,” the Facebook and
12 Instagram platforms only rarely prompt their users to take a break by using ““stopping cues.””¹⁸⁸
13 The “bottomless scrolling” feature is designed to encourages users to use its platforms for
14 unlimited periods of time.

15 165. Facebook and Instagram also exert control over a user’s feed through certain
16 ranking mechanisms, escalation loops, and promotion of advertising and content specifically
17 selected and promoted based on, among other things, its ongoing planning, assessment, and
18 prioritization of the types of information most likely to increase user engagement.

19 166. As described above, the algorithms generating a user’s feed encourage excessive
20 use and promote harmful content, particularly where the algorithm is designed to prioritize the
21 number of interactions rather than the quality of interactions.

22 167. In this regard, Facebook and Instagram use private information of their child users
23 to “precisely target [them] with content and recommendations, assessing . . . what will provoke a
24 reaction,” including encouragement of “destructive and dangerous behaviors,” which is how they
25

26 ¹⁸⁸ See Zara Abrams, *How can we minimize Instagram’s harmful effects?; Psychologists’ research*
27 *has shown that Instagram use is associated both with beneficial and detrimental effects –*
28 *depending on how it’s used*, Am. Psych. Ass’n (Dec. 2, 2021),
<https://www.apa.org/monitor/2022/03/feature-minimize-instagram-effects>.

1 “can push teens into darker and darker places.”¹⁸⁹ As such, Facebook’s “amplification algorithms,
 2 things like engagement based ranking . . . can lead children . . . all the way from just something
 3 innocent like healthy recipes to anorexia promoting content over a very short period of time.”¹⁹⁰
 4 Facebook and Instagram thus specifically select and push this harmful content on their platforms,
 5 for which they are then paid, and do so both for direct profit and also to increase user engagement,
 6 resulting in additional profits down the road.

7 168. As one example, in 2021, Senators Richard Blumenthal, Marsha Blackburn, and
 8 Mike Lee tested and confirmed the fact that the Facebook and Instagram platforms’
 9 recommendation-based feeds and features promote harmful content by opening test accounts
 10 purporting to be teenage girls. Senator Blumenthal stated: “‘Within an hour all of our
 11 recommendations promoted pro-anorexia and eating disorder content.’”¹⁹¹ Likewise, Senator Lee
 12 found that an account for a fake 13-year-old girl was quickly “flooded with content about diets,
 13 plastic surgery and other damaging material for an adolescent girl.”¹⁹²

14 169. Instagram features a feed of “Stories,” which are short-lived photo or video posts
 15 that are accessible only for 24 hours. This feature encourages constant, repeated, and compulsive
 16 use of Instagram so that users do not miss out on content before it disappears. As with other feeds,
 17 the presentation of content in a user’s Stories is generated by an algorithm designed by Instagram
 18 to maximize the amount of time a user spends on the app.

19 170. Instagram also features a feed called “Explore,” which displays content posted by
 20 users not previously “followed.” The content in “Explore” is selected and presented by an
 21

22 ¹⁸⁹ See *Facebook Whistleblower Frances Haugen Testifies on Children & Social Media Use: Full*
 23 *Senate Hearing Transcript* at 09:02 Rev (Oct. 5, 2021), [https://www.rev.com](https://www.rev.com/blog/transcripts/facebook-whistleblower-frances-haugen-testifies-on-children-social-media-use-full-senate-hearing-transcript)
 24 [/blog/transcripts/facebook-whistleblower-frances-haugen-testifies-on-children-social-media-use-](https://www.rev.com/blog/transcripts/facebook-whistleblower-frances-haugen-testifies-on-children-social-media-use-full-senate-hearing-transcript)
[full-senate-hearing-transcript](https://www.rev.com/blog/transcripts/facebook-whistleblower-frances-haugen-testifies-on-children-social-media-use-full-senate-hearing-transcript) (statement by Chairman Richard Blumenthal).

25 ¹⁹⁰ *Id.* at 37:34 (statement by Frances Haugen (“Haugen”)).

26 ¹⁹¹ Vanessa Romo, *4 takeaways from senators’ grilling of Instagram’s CEO about kids and safety*,
 27 NPR (Dec. 8, 2021), [https://www.npr.org/2021/12/08/1062576576/instagrams-ceo-adam-](https://www.npr.org/2021/12/08/1062576576/instagrams-ceo-adam-mosseri-hears-senators-brush-aside-his-promises-to-self-poli)
[mosseri-hears-senators-brush-aside-his-promises-to-self-poli](https://www.npr.org/2021/12/08/1062576576/instagrams-ceo-adam-mosseri-hears-senators-brush-aside-his-promises-to-self-poli).

28 ¹⁹² *Id.*

1 algorithm designed to maximize the amount of time a user spends on the app. As with other feeds,
 2 the Explore feature may be scrolled endlessly; and its algorithm will continually generate new
 3 recommendations, encouraging users to use the app for unlimited periods of time.

4 171. Instagram also features a feed called “Reels,” which presents short video posts by
 5 users not previously followed. These videos play automatically, without input from the user,
 6 encouraging the user to stay on the app for indefinite periods of time. As with other feeds, Reels
 7 content is selected and presented by an algorithm designed to maximize the amount of time a user
 8 spends on the app.

9 **7. For Years, Facebook and Instagram Have Been Aware that**
 10 **Their Platforms Harm Children**

11 172. Social media platforms like Facebook – and Instagram in particular – can cause
 12 serious harm to the mental and physical health of children. Moreover, this capacity for harm is by
 13 design – what makes these platforms profitable is precisely what harms its young users.

14 173. In an internal slide presentation in 2019, Facebook’s own researchers studying
 15 Instagram’s effects on children concluded: “We make body image issues worse for one in three
 16 teen girls.”¹⁹³ This presentation was one of many documents leaked by former employee Haugen
 17 to journalists at *The Wall Street Journal* and federal regulators in 2021.¹⁹⁴ *The Wall Street*
 18 *Journal*’s reporting on the documents began in September 2021 and caused a national and
 19 international uproar.
 20
 21

22 ¹⁹³ Georgia Wells et al., *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents*
 23 *Show; Its own in-depth research shows a significant teen mental-health issue that Facebook plays*
down in public, Wall St. J. (Sept. 14, 2021), [https://www.wsj.com/articles/facebook-knows-](https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739)
[instagram-is-toxic-for-teen-girls-company-](https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739) documents-show-11631620739.

24 ¹⁹⁴ *The Wall Street Journal* and *Digital Wellbeing* published several of these documents in
 25 November 2021. See, e.g., Paul Marsden, *The ‘Facebook Files’ on Instagram harms – all leaked*
 26 *slides on a single page*, Digit. Wellbeing (Oct. 20, 2021), [https://digitalwellbeing.org/the-](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page/)
 27 [facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page/](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page/). Gizmodo also started
 28 publishing these documents in November 2021. See Dell Cameron et al., *Read the Facebook*
Papers for Yourself; Hundreds of internal documents formed the basis of dozen of news stories.
They have not been made public. Until now, Gizmodo (Feb. 14, 2023),
<https://gizmodo.com/facebook-papers-how-to-read-1848702919>.

1 174. Upon information and belief, at least as far back as 2019, Facebook initiated a
 2 Proactive Incident Response experiment, which began researching the effect of Facebook and
 3 Instagram on the mental health of today's children.¹⁹⁵ Facebook's own in-depth analyses show
 4 significant mental-health issues stemming from the use of Instagram among teenage girls, many
 5 of whom linked suicidal thoughts and eating disorders to their experiences on the app.¹⁹⁶ In this
 6 regard, the companies' own researchers have repeatedly found that Instagram is harmful for a
 7 sizable percentage of teens who use the platform.¹⁹⁷

8 175. In particular, the researchers found that "[s]ocial comparison," or peoples'
 9 assessment of their own value relative to that of others, is "worse on Instagram" for teens than
 10 on other social media platforms.¹⁹⁸ One in five teens reported that Instagram makes "them feel
 11 worse about themselves."¹⁹⁹ Roughly two in five teen users reported feeling "unattractive,"
 12 while one in ten teen users reporting suicidal thoughts traced them to Instagram.²⁰⁰ Teens
 13 "consistently" and without prompting blamed Instagram "for increases in the rate of anxiety and
 14 depression."²⁰¹ Although teenagers identify Instagram as a source of psychological harm, they
 15 often lack the self-control to use Instagram less. Also, according to their own researchers, young
 16 users are not capable of controlling their Instagram use to protect their own health.²⁰² Such users
 17
 18

19 ¹⁹⁵ See *Facebook Whistleblower Testifies on Protecting Children Online*, C-SPAN (Oct. 5, 2021),
 20 <https://www.c-span.org/video/?515042-1/whistleblower-frances-haugen-calls-congress-regulate-facebook>.

21 ¹⁹⁶ See Georgia Wells et al., *Facebook Knows Instagram Is Toxic for Teen Girls, Company*
 22 *Documents Show*, Wall St. J. (Sept. 14, 2021), <https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739>.

23 ¹⁹⁷ *Id.*

24 ¹⁹⁸ *Id.*

25 ¹⁹⁹ *Id.*

26 ²⁰⁰ *Id.*

27 ²⁰¹ *Id.*

28 ²⁰² *Id.*

1 “‘often feel “addicted” and know that what they’re seeing is bad for their mental health but feel
2 unable to stop themselves.”’²⁰³

3 176. Similarly, in a March 2020 presentation posted to Facebook’s internal message
4 board, researchers found that “[t]hirty-two percent of teen girls said that when they felt bad about
5 their bodies, Instagram made them feel worse.”²⁰⁴ Sixty-six percent of teen girls and 40% of teen
6 boys have experienced negative social comparison harms on Instagram.²⁰⁵ Further, approximately
7 13% of teen girl Instagram users say the platform makes thoughts of “suicide and self harm” worse,
8 and 17% of teen girl Instagram users say the platform makes “[e]ating issues” worse.²⁰⁶ Internal
9 researchers also acknowledged that “[m]ental health outcomes” related to the use of Instagram
10 “can be severe,” including: (i) “Body Dissatisfaction”; (ii) “Body Dysmorphia”; (iii) “Eating
11 Disorders”; (iv) “Loneliness”; and (v) “Depression.”²⁰⁷

12 177. Not only is Facebook aware of the harmful nature of the Facebook and Instagram
13 platforms, the leaked documents reveal that Facebook is aware of the specific design features that
14 lead to excessive use and harm to children. For instance, Facebook and Instagram know that their

15 ²⁰³ *Id.*

16 ²⁰⁴ *Id.*; see also *Teen Girls Body Image and Social Comparison on Instagram – An Exploratory*
17 *Study in the U.S.*, Wall St. J. (Sept. 29, 2021), [https://digitalwellbeing.org/wp-content/](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf)
18 [uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf)
19 [Instagram.pdf](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf); *Hard Life Moments-Mental Health Deep Dive* at 14, Facebook (Nov. 2019),
20 [https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-](https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf)
21 [1.pdf](https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf); Paul Marsden, *The ‘Facebook Files’ on Instagram harms – all leaked slides on a single*
22 *page* at slide 14, Digit. Wellbeing (Oct. 20, 2021), [https://digitalwellbeing.org/the-facebook-files-](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page)
23 [on-instagram-harms-all-leaked-slides-on-a-single-page](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page) (hard life moment – mental health deep
24 dive).

25 ²⁰⁵ *Teen Girls Body Image and Social Comparison on Instagram – An Exploratory Study in the*
26 *U.S.* at 9, Wall St. J. (Sept. 29, 2021), [https://digitalwellbeing.org/wp-content/uploads/](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf)
27 [2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf).

28 ²⁰⁶ *Hard Life Moments-Mental Health Deep Dive* at 14, Facebook (Nov. 2019),
[https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-](https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf)
[1.pdf](https://about.fb.com/wp-content/uploads/2021/09/Instagram-Teen-Annotated-Research-Deck-1.pdf); Paul Marsden, *The Facebook Files’ on Instagram harms – all leaked slides on a single page*
at slide 14, Digit. Wellbeing (Oct. 20, 2021), [https://digitalwellbeing.org/the-facebook-files-on-](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page)
[instagram-harms-all-leaked-slides-on-a-single-page](https://digitalwellbeing.org/the-facebook-files-on-instagram-harms-all-leaked-slides-on-a-single-page).

²⁰⁷ *Teen Girls Body Image and Social Comparison on Instagram – An Exploratory Study in the*
U.S. at 34, Wall St. J. (Sept. 29, 2021), [https://digitalwellbeing.org/wp-content/uploads/2021](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf)
[/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf](https://digitalwellbeing.org/wp-content/uploads/2021/10/Facebook-Files-Teen-Girls-Body-Image-and-Social-Comparison-on-Instagram.pdf).

1 “[r]anking can promote problematic content” to children “[i]nsofar as problematic content is often
 2 more engaging than unproblematic content, ranking runs the risk of favoring the problematic.”²⁰⁸
 3 They also know that Instagram’s Explore, Feed, and Stories features contribute to social
 4 comparison harms “in different ways.”²⁰⁹ Moreover, specific “[a]spects of Instagram exacerbate
 5 each other to create a perfect storm” of harm to users, and the “[s]ocial [c]omparison [s]weet
 6 [s]pot” – a place of considerable harm to users, particularly teenagers and teen girls – lies at the
 7 center of Meta’s model and platforms’ features.²¹⁰ Internal researchers wrote that “social
 8 comparison and perfectionism are nothing new, but young people are dealing with this on an
 9 unprecedented scale” and “constant comparison on Instagram is contributing to higher levels of
 10 anxiety and depression.”²¹¹

11 **H. YouTube’s Social Media Platform Has Substantially Contributed to** 12 **the Youth Mental Health Crisis**

13 178. YouTube is a platform where users can post, share, view, and comment on videos
 14 related to a vast range of topics. The platform became available publicly in December 2005 and
 15 was acquired by Google in 2006.

16 179. YouTube reports that it has over 2 billion monthly logged-in users.²¹² Even more
 17 people use YouTube each month because consumers do not have to register an account to view a
 18 video on YouTube. As a result, anyone can view most content on YouTube regardless of age.

19 180. Users, whether logged in or not, watch *billions of hours of videos every day*.²¹³

20
 21
 22 ²⁰⁸ TIER2_RANK_EXP_0518 – DocumentCloud.

23 ²⁰⁹ *Id.* at 31.

24 ²¹⁰ *Id.* at 33.

25 ²¹¹ See *The Facebook Files, Part 2: ‘We Make Body Image Issues Worse,’* Wall St. J. (Sept. 14,
 26 2021), <https://www.wsj.com/podcasts/the-journal/the-facebook-files-part-2-we-make-body-image-issues-worse/c2c4d7ba-f261-4343-8d18-d4de177cf973>.

27 ²¹² *YouTube for Press*, YouTube, <https://blog.youtube/press/> (last visited Feb. 27, 2023).

28 ²¹³ *Id.*

181. Users with accounts can post their own videos, comment on others, and since 2010, express their approval of videos through “likes.”²¹⁴

182. Beginning in 2008 and through today, YouTube has recommended videos to users.²¹⁵ Early on, the videos YouTube recommended to users were the most popular videos across the platform.²¹⁶ YouTube admits “[n]ot a lot of people watched those videos,” at least not based on its recommendation.²¹⁷

183. Since then, YouTube has designed and refined its recommendation system using machine-learning algorithms that today take into account a user’s “likes,” time spent watching a video, and other behaviors to tailor its recommendations to each user.²¹⁸

184. YouTube automatically plays those recommendations for a user after they finish watching a video. This feature, known as “autoplay,” was implemented in 2015. YouTube turns the feature on by default, which means videos automatically and continuously play for users unless they turn it off.²¹⁹

185. YouTube purports to disable by default its autoplay feature for users aged 13 to 17.²²⁰ However, as mentioned above, YouTube does not require users to log in or even have an account to watch videos. For them or anyone who does not self-report an age between 13 and 17, YouTube defaults to automatically playing the videos its algorithm recommends to the user.

²¹⁴ Josh Lowensohn, *YouTube’s big redesign goes live to everyone*, CNET (Mar. 31, 2010), <https://www.cnet.com/culture/youtubes-big-redesign-goes-live-to-everyone/>.

²¹⁵ Cristos Goodrow, *On YouTube’s recommendation system*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²¹⁶ *Id.*

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Autoplay videos*, YouTube Help, <https://support.google.com/youtube/answer/6327615?hl=en#:~:text=For%20users%20aged%2013%2D17,turned%20off%20Autoplay%20for%20you> (last visited Feb. 27, 2023).

²²⁰ *Id.*

1. YouTube Designs and Markets Its Platform to Appeal to a Youth Audience

186. The primary way YouTube makes money is through advertising. It made \$19 billion in advertising revenue in 2021 alone.²²¹ Consequently, Google has designed YouTube to maximize user engagement, predominantly through the amount of time users spend watching videos.

187. “In 2012, YouTube concluded that the more people watched, the more ads it could run So YouTube . . . set a company-wide objective to reach one billion hours of viewing a day”²²²

188. “[T]he best way to keep eyes on the site,” YouTube realized, was “recommending videos, alongside a clip or after one was finished.”²²³ That is what led to the development of its recommendation algorithm and autoplay feature described above.

189. YouTube has long known youth use its platforms in greater proportion than older demographics.

190. However, YouTube has not implemented even rudimentary protocols to verify the age of users. Anyone can watch a video on YouTube without registering an account or reporting their age.

191. Instead, YouTube leveraged its popularity among youth to increase its revenue from advertisements by marketing its platform to popular brands of children’s products. For example, Google pitched Mattel, the maker of Barbie and other popular children’s toys, by telling its executives: “YouTube is today’s leader in reaching children age 6-11 against top TV

²²¹ Alphabet Inc.'s 2021 Annual Report on SEC Form 10-K at 60 (Feb. 1, 2022), <https://www.sec.gov/ix?doc=/Archives/edgar/data/1652044/000165204422000019/goog-20211231.htm>.

²²² Mark Bergen, *YouTube Executive Ignores Warnings, Letting Toxic Videos Run Rampant*, Bloomberg (Apr. 2, 2019), <https://www.bloomberg.com/news/features/2019-04-02/youtube-executives-ignored-warnings-letting-toxic-videos-run-rampant?leadSource=uverify%20wall>.

223 *Id.*

channels.”²²⁴ When presenting to Hasbro, Google touted: “YouTube is unanimously voted as the favorite website of kids 2-12” and “93% of tweens visit YouTube to watch videos.”²²⁵ In a different presentation to Hasbro, YouTube was referred to as “[t]he new ‘Saturday Morning Cartoons’” and claimed YouTube was the “#1 website regularly visited by kids” and “the #1 source where children discover new toys + games.”²²⁶

192. In addition to turning a blind eye toward underage users of its platform, YouTube developed and marketed a version of YouTube specifically for children under the age of 13.

193. YouTube’s efforts to attract young users have been successful. A vast majority, 95%, of children aged 13 to 17 have used YouTube.²²⁷

2. YouTube Intentionally Designs Features to Keep Its Users on Its Platform for as Long as Possible

194. Google employs design features and complex algorithms to create a never-ending stream of videos intended to grip users’ attention.

195. Like the other Defendants’ social media platforms, Google developed features that exploit psychological phenomena such as IVRs to maximize the time users spend on YouTube.

196. YouTube uses design elements that operate on principles of IVRs to drive both YouTube content creators and YouTube viewers into habitual, excessive use. Google designed YouTube to allow users to like, comment, and share videos and to subscribe to content creators’ channels. These features serve as rewards for users who create and upload videos to YouTube. As described above, receiving a like indicates others’ approval and activates the reward region of

²²⁴ Complaint for Permanent Injunction, Civil Penalties, and Other Equitable Relief, Exhibits A-C, *FTC v. Google LLC et al.*, No. 1-19-cv-02642-BAH, ECF 1-1 (D.D.C. Sept. 4, 2019).

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ *Id.*

the brain.²²⁸ The use of likes therefore encourages users to use YouTube over and over, seeking future pleasurable experiences.

197. YouTube also uses IVRs to encourage users to view others' content. One of the ways Google employs IVRs into YouTube's design is through subscriber push notifications and emails, which are designed to prompt users to watch YouTube content and encourages excessive use of the platform. When a user "subscribe[s]" to another user's channel, the subscriber receives notifications every time that user uploads new content, prompting the subscriber to open YouTube and watch the video.²²⁹

198. One of YouTube's defining features is its panel of recommended videos. YouTube recommends videos to users on both the YouTube home page and on every individual video page in an "Up Next" panel.²³⁰ This list automatically populates next to the video a user is currently watching. This recommended video list is a never-ending feed of videos intended to keep users on the app watching videos without having to affirmatively click or search for other videos. This constant video stream, comprised of videos recommended by YouTube's algorithms, is the primary way Google increases the time users spend on YouTube.

3. YouTube's Algorithms Are Manipulative and Harmful, Especially to a Youth Audience

199. Google uses complex algorithms throughout YouTube to recommend videos to users. These algorithms select videos that populate the YouTube homepage, rank results in user searches, and suggest videos for viewers to watch next. These algorithms are manipulative because they are designed to increase the amount of time users spend on YouTube.

²²⁸ See, e.g., Lauren E. Sherman et al., *The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media*, 27(7) Psych. Sci. 1027-35 (July 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5387999/>.

²²⁹ *Manage YouTube Notifications*, YouTube, <https://support.google.com/youtube/answer/3382248?hl=en&co=GENIE.Platform%3DDesktop> (last visited Feb. 27, 2023).

²³⁰ *Recommended Videos*, YouTube, <https://www.youtube.com/howyoutubeworks/product-features/recommendations/> (last visited Feb. 27, 2023).

200. Google began building the YouTube recommendation system in 2008.²³¹ When Google initially developed its recommendation algorithms, the end goal was to maximize the amount of time users spend watching YouTube videos. A YouTube spokesperson admitted as much, saying YouTube’s recommendation system was initially set up to “optimize” the amount of time users watch videos.²³²

201. Former YouTube engineer Guillaume (“Chaslot”) has stated that when he worked for YouTube designing its recommendation algorithm, the priority was to keep viewers on the site for as long as possible to maximize “watch time.”²³³ Chaslot further stated: “Increasing users’ watch time is good for YouTube’s business model” because the more people watch videos, the more ads they see, and YouTube’s advertising revenue increases.²³⁴

202. Early on, one of the primary metrics behind YouTube’s recommendation algorithm was clicks. As YouTube describes: “Clicking on a video provides a strong indication that you will also find it satisfying.”²³⁵ However, as YouTube learned, clicking on a video does not mean a user actually watched it. Thus, in 2012, YouTube also started tracking watch time – the amount of time a user spends watching a video.²³⁶ YouTube made this switch to keep people watching for as long

²³¹ Cristos Goodrow, *On YouTube’s recommendation system*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²³² Ben Popken, *As algorithms take over, YouTube’s recommendations highlight a human problem*, NBC (Apr. 19, 2018), <https://www.nbcnews.com/tech/social-media/algorithms-take-over-youtube-s-recommendations-highlight-human-problem-n867596>.

²³³ William Turton, *How YouTube’s algorithm prioritizes conspiracy theories*, Vice (Mar. 5, 2018), <https://www.vice.com/en/article/d3w9ja/how-youtubes-algorithm-prioritizes-conspiracy-theories>.

²³⁴ Jesselyn Cook & Sebastian Murdock, *YouTube is a Pedophile’s Paradise*, Huffington Post (Mar. 21, 2020), https://www.huffpost.com/entry/youtube-pedophile-paradise_n_5e5d79d1c5b6732f50e6b4db.

²³⁵ Cristos Goodrow, *On YouTube’s Recommendation System*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²³⁶ *Id.*

as possible.²³⁷ In YouTube’s own words, this switch was successful. “These changes have so far proved very positive – primarily less clicking, more watching. We saw the amount of time viewers spend watching videos across the site increase immediately”²³⁸ In 2016, YouTube started measuring “valued watchtime” via user surveys to ensure that viewers are satisfied with their time spent watching videos on YouTube.²³⁹ All of these changes to YouTube’s algorithms were made to ensure that users spend more time watching videos and ads.

203. YouTube’s current recommendation algorithm is based on deep-learning neural networks that retune its recommendations based on the data fed into it.²⁴⁰ While this algorithm is incredibly complex, its process can be broken down into two general steps. First, the algorithm compiles a shortlist of several hundred videos by finding videos that match the topic and other features of the video a user is currently watching.²⁴¹ Then the algorithm ranks the list according to the user’s preferences, which the algorithm learns by tracking a user’s clicks, likes, and other interactions.²⁴² In short, the algorithms track and measure a user’s previous viewing habits and then finds and recommends other videos the algorithm thinks will hold the consumer’s attention.

²³⁷ Dave Davies, *How YouTube became one of the planet’s most influential media businesses*, NPR (Sept. 8, 2022), <https://www.npr.org/2022/09/08/1121703368/how-youtube-became-one-of-the-planets-most-influential-media-businesses>.

²³⁸ Eric Meyerson, *YouTube Now: Why We Focus on Watch Time*, YouTube (Aug. 10, 2012), <https://blog.youtube/news-and-events/youtube-now-why-we-focus-on-watch-time/>.

²³⁹ Cristos Goodrow, *On YouTube’s recommendation system*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²⁴⁰ Alexis C. Madrigal, *How YouTube’s Algorithm Really Works*, Atl. (Nov. 8, 2018), <https://www.theatlantic.com/technology/archive/2018/11/how-youtubes-algorithm-really-works/575212/>; Paul Covington et al., *Deep Neural Networks for YouTube Recommendations*, Google (2016), <https://storage.googleapis.com/pub-tools-public-publication-data/pdf/45530.pdf>.

²⁴¹ Karen Hao, *YouTube is experimenting with ways to make its algorithm even more addictive*, MIT Tech. Rev. (Sept. 27, 2019), <https://www.technologyreview.com/2019/09/27/132829/youtube-algorithm-gets-more-addictive/>; Paul Covington et al., *Deep Neural Networks for YouTube Recommendations*, Google (2016), <https://storage.googleapis.com/pub-tools-public-publication-data/pdf/45530.pdf>.

²⁴² Karen Hao, *YouTube is experimenting with ways to make its algorithm even more addictive*, MIT Tech. Rev. (Sept. 27, 2019), <https://www.technologyreview.com/2019/09/27/132829/youtube-algorithm-gets-more-addictive/>; Paul Covington et al., *Deep Neural Networks for*

204. YouTube’s recommendation system is “constantly evolving, learning every day from over 80 billion pieces of information.”²⁴³ Some of the information on which the recommendation algorithm relies to deliver recommended videos to users includes users’ watch and search history, channel subscriptions, clicks, watch time, survey responses, shares, likes, dislikes, users’ location (country), and time of day.²⁴⁴

205. The recommendation algorithm can determine which “signals” or factors are more important to individual users.²⁴⁵ For example, if a user shares every video they watch, including videos the user gives a low rating, the algorithm learns not to heavily factor the user’s shares when recommending content.²⁴⁶ Thus, the recommendation algorithm “develops dynamically” to an individual user’s viewing habits and makes highly specific recommendations to keep individual users watching videos.²⁴⁷

206. In addition to the algorithm’s self-learning, Google engineers consistently update YouTube’s recommendation and ranking algorithms, making several updates every month, according to YouTube Chief Product Officer Neal Mohan (“Mohan”).²⁴⁸ The end goal is to increase the amount of time users spend watching content on YouTube.

207. Because Google has designed and refined its algorithms to be manipulative, these algorithms are incredibly successful at getting users to view content based on the algorithm’s

YouTube Recommendations, Google (2016), <https://storage.googleapis.com/pub-tools-public-publication-data/pdf/45530.pdf>.

²⁴³ Cristos Goodrow, *On YouTube’s Recommendation System*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²⁴⁴ *Recommended Videos*, YouTube, <https://www.youtube.com/howyoutubeworks/product-features/recommendations/#signals-used-to-recommend-content> (last visited Feb. 27, 2023).

²⁴⁵ *Id.*

²⁴⁶ *Id.*

²⁴⁷ Cristos Goodrow, *On YouTube’s Recommendation System*, YouTube (Sept. 15, 2021), <https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/>.

²⁴⁸ Nilay Patel, *YouTube Chief Product Officer Neal Mohan on The Algorithm, Monetization, and the Future for Creators*, The Verge (Aug. 3, 2021), <https://www.theverge.com/22606296/youtube-shorts-fund-neal-mohan-decoder-interview>.

1 recommendation. Mohan stated in 2018 that YouTube’s AI-driven recommendations are
 2 responsible for 70% of the time users spend on YouTube.²⁴⁹ In other words, 70% of all YouTube
 3 content that users watch was recommended to users by YouTube’s algorithms as opposed to users
 4 purposely searching for and identifying the content they watch.

5 208. Mohan also stated that recommendations keep mobile device users watching
 6 YouTube for more than 60 minutes at a time on average.²⁵⁰

7 209. Given that people watch more than one billion hours of YouTube videos daily,²⁵¹
 8 YouTube’s recommendation algorithms are responsible for hundreds of millions of hours that
 9 users spend watching videos on YouTube.

10 **4. YouTube’s Conduct Has Harmed Youth Mental Health**

11 210. YouTube’s conduct harms youth mental health through its features designed to
 12 maximize the amount of time users spend watching videos and by recommending harmful content
 13 to youth through its algorithms.

14 211. YouTube’s algorithms push its young users down rabbit holes where they are likely
 15 to encounter content that is divisive, extreme, violent, sexual, or encouraging of self-harm, among
 16 other types of harmful content.

17 212. Research by the Tech Transparency Project (“TTP”) shows that YouTube Kids fed
 18 children content involving drug culture, guns, and beauty and diet tips that could lead to harmful
 19 body image issues.²⁵² Among the videos TTP found were step-by-step instructions on how to
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22
 23 ²⁴⁹ Joan E. Solsman, *YouTube’s AI is the puppet master over most of what you watch*, CNET (Jan. 20, 2018), <https://www.cnet.com/tech/services-and-software/youtube-ces-2018-neal-mohan/>.

24 ²⁵⁰ *Id.*

25 ²⁵¹ Shira Ovide, *The YouTube Rabbit Hole is Nuanced*, N.Y. Times (Apr. 21, 2022),
 26 <https://www.nytimes.com/2022/04/21/technology/youtube-rabbit-hole.html>.

27 ²⁵² Alex Hern, *YouTube Kids shows videos promoting drug culture and firearms to toddlers*,
 28 Guardian (May 5, 2022), <https://www.theguardian.com/technology/2022/may/05/youtube-kids-shows-videos-promoting-drug-culture-firearms-toddlers>.

1 conceal a gun.²⁵³ The research shows that YouTube Kids not only lets inappropriate content slip
 2 through its algorithmic filters but actively directed the content to children through its
 3 recommendation engine.

4 213. Similar examples abound. Amanda Kloer, a campaign director with the child safety
 5 group ParentsTogether, spent an hour on her child's YouTube Kids profile and found videos
 6 "encouraging kids how to make their shirts sexier, a video in which a little boy pranks a girl over
 7 her weight, and a video in which an animated dog pulls objects out of an unconscious animated
 8 hippo's butt."²⁵⁴ Another parent recounted that YouTube Kids' autoplay function led her six-year-
 9 old daughter to an animated video that encouraged suicide.²⁵⁵

10 214. Other youth are fed content by YouTube's algorithms that encourages self-harm.
 11 As reported by PBS Newshour, a middle schooler named Olivia compulsively watched YouTube
 12 videos every day after she came home from school.²⁵⁶ Over time she became depressed and started
 13 watching videos on how to commit suicide. Similar videos then gave her the idea of overdosing.
 14 Weeks later she was in the hospital after "downing a bottle of Tylenol."²⁵⁷ Ultimately, she was
 15 admitted into rehab for digital addiction because of her compulsive YouTube watching.²⁵⁸

16 215. According to the Pew Research Center, 46% of parents say their child has
 17 encountered inappropriate videos on YouTube.²⁵⁹ Children are not encountering these videos on

18
 19 ²⁵³ *Guns, Drugs, and Skin Bleaching: YouTube Kids Poses Risks to Children*, Tech Transparency
 20 Project (May 5, 2022), <https://www.techtransparencyproject.org/articles/guns-drugs-and-skin-bleaching-youtube-kids-still-poses-risks-children>.

21 ²⁵⁴ Rebecca Heilweil, *YouTube's kids app has a rabbit hole problem*, Vox (May 12, 2021),
<https://www.vox.com/recode/22412232/youtube-kids-autoplay>.

22 ²⁵⁵ *Id.*

23 ²⁵⁶ Lesley McClurg, *After compulsively watching YouTube, teenage girl lands in rehab for 'digital*
 24 *addiction*, PBS (May 16, 2017), <https://www.pbs.org/newshour/health/compulsively-watching-youtube-teenage-girl-lands-rehab-digital-addiction>.

25 ²⁵⁷ *Id.*

26 ²⁵⁸ *Id.*

27 ²⁵⁹ Brooke Auxier et al., *Parenting Children in the Age of Screens*, Pew Rsch. Ctr. (July 28, 2020),
 28 <https://www.pewresearch.org/internet/2020/07/28/parental-views-about-youtube/>.

1 their own volition. Rather, they are being fed harmful and inappropriate videos through
 2 YouTube's algorithms. Again, YouTube's AI-driven recommendations are responsible for 70%
 3 of the time users spend on YouTube.²⁶⁰

4 216. Other reports have also found that YouTube's recommendation algorithm suggests
 5 a wide array of harmful content, including videos that feature misinformation, violence, and hate
 6 speech, along with other content that violates YouTube's policies.²⁶¹ A 2021 crowdsourced
 7 investigation from the Mozilla Foundation involving 37,000 YouTube users revealed that 71% of
 8 all reported negative user experiences came from videos recommended by YouTube to users.²⁶²
 9 Additionally, users were 40% more likely to report a negative experience with a video
 10 recommended by YouTube's algorithm than with a video for which they had searched.²⁶³

11 217. The inappropriate and disturbing content to which YouTube's algorithms expose
 12 children have adverse effects on mental health. Mental health experts have warned that YouTube
 13 is a growing source of anxiety and inappropriate sexual behavior among children under the age of
 14 13.²⁶⁴

15 218. Further the harmful content to which YouTube's algorithms expose children harm
 16 brain development. "Children who repeatedly experience stressful and/or fearful emotions may
 17 under-develop parts of their brain's prefrontal cortex and frontal lobe, the parts of the brain
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 19
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21 ²⁶⁰ Joan E. Solsman, *YouTube's AI is the puppet master over most of what you watch*, CNET (Jan.
 22 20, 2018), <https://www.cnet.com/tech/services-and-software/youtube-ces-2018-neal-mohan/>.

23 ²⁶¹ Brandy Zadrozny, *YouTube's recommendations still push harmful videos, crowdsourced study*
 24 *finds*, NBC News (July 17, 2021), <https://www.nbcnews.com/tech/tech-news/youtubes-recommendations-still-push-harmful-videos-crowdsourced-study-rcna1355>.

25 ²⁶² *Id.*

26 ²⁶³ *Id.*

27 ²⁶⁴ Josephine Bila, *YouTube's dark side could be affecting your child's mental health*, CNBC
 28 (Feb. 13, 2018), <https://www.cnbc.com/2018/02/13/youtube-is-causing-stress-and-sexualization-in-young-children.html>.

1 responsible for executive functions, like making conscious choices and planning ahead,” according
2 to Donna Volpitta, Ed.D., founder of The Center for Resilient Leadership.²⁶⁵

3 219. Even though much of the content YouTube’s algorithms feed to youth is harmful,
4 it triggers chemical reactions that encourage youth to spend more time watching videos on
5 YouTube. According to Dr. Volpitta, watching “fear-inducing videos cause the brain to receive a
6 small amount of dopamine,” which acts as a reward and creates a desire to do something over and
7 over.²⁶⁶ This dopaminergic response is in addition to the reward stimulus YouTube provides users
8 through IVRs.

9 220. Mental health professionals across the country have seen an increase in children
10 experiencing mental health issues because of YouTube. Natasha Daniels, a child psychotherapist
11 in Arizona, has said she has seen a rise in cases of children suffering from anxiety because of
12 videos they watched on YouTube.²⁶⁷ Because of their anxiety, these children “exhibit loss of
13 appetite, sleeplessness, crying fits and fear.”²⁶⁸

14 221. In addition to causing anxiety, watching YouTube is also associated with
15 insufficient sleep.²⁶⁹ In one study on the effect of app use and sleep, YouTube was the only app
16 consistently associated with negative sleep outcomes.²⁷⁰ For every 15 minutes teens spent
17 watching YouTube, they had a 24% greater chance of getting fewer than seven hours of sleep.²⁷¹
18 YouTube is particularly problematic on this front because YouTube’s recommendation and
19 autoplay feature make it “so easy to finish one video” and watch the next, said Dr. Alon Avidan,

20 ²⁶⁵ *Id.*

21 ²⁶⁶ *Id.*

22 ²⁶⁷ *Id.*

23 ²⁶⁸ *Id.*

24 ²⁶⁹ Meg Pillion et al., *What’s ‘app’-ning to adolescent sleep? Links between device, app use, and*
25 *sleep outcomes*, 100 *Sleep Med.* 174-82 (Dec. 2022), [https://www.sciencedirect.com/science/](https://www.sciencedirect.com/science/article/abs/pii/S1389945722010991?via%3Dihub)
26 [article/abs/pii/S1389945722010991?via%3Dihub](https://www.sciencedirect.com/science/article/abs/pii/S1389945722010991?via%3Dihub).

27 ²⁷⁰ *Id.*

28 ²⁷¹ *Id.*

1 director of the UCLA Sleep Disorders Center.²⁷² In turn, insufficient sleep is associated with poor
 2 health outcomes.²⁷³ Thus, YouTube exacerbates an array of youth mental health issues by
 3 contributing to sleep deprivation.

4 222. Despite the vast evidence that YouTube’s design and algorithms harm millions of
 5 youth, Google continues to manipulate them into staying on the platform and watching more and
 6 more videos so it can increase its ad revenue.

7 **I. Snapchat’s Social Media Platform Has Substantially Contributed to**
 8 **the Youth Mental Health Crisis**

9 223. Snapchat is a photo-sharing platform that allows users to form groups and share
 10 photos, known as “snaps,” that disappear after being viewed by the recipients. It was created in
 11 2011 by Stanford University students Evan Spiegel and Bobby Murphy, who serve as Snap’s Chief
 12 Executive Officer (“CEO”) and Chief Technical Officer (“CTO”), respectively.²⁷⁴

13 224. Snapchat quickly evolved from a simple photo-sharing app as Snap made design
 14 changes and rapidly developed new features aimed at, and ultimately increasing Snapchat’s
 15 popularity among, teenage users.

16 225. Today, Snapchat is one of the largest social media platforms in the world. By its
 17 own estimates, Snapchat has 363 million daily users, including 100 million daily users in North
 18 America.²⁷⁵ Snapchat reaches 90% of people aged 13 to 24 in over 20 countries and reaches nearly
 19 half of all smartphone users in the United States.²⁷⁶

20
 21 ²⁷² Cara Murez, *One App is Especially Bad for Teens’ Sleep*, U.S. News (Sept. 13, 2022),
 22 <https://www.usnews.com/news/health-news/articles/2022-09-13/one-app-is-especially-bad-for-teens-sleep>.

23 ²⁷³ Jessica C. Levenson et al., *The Association Between Social Media Use and Sleep Disturbance*
 24 *Among Young Adults*, 85 Preventive Med. 36-41 (Apr. 2016), <https://www.sciencedirect.com/science/article/abs/pii/S0091743516000025>.

25 ²⁷⁴ Katie Benner, *How Snapchat is Shaping Social Media*, N.Y. Times (Nov. 30, 2016),
 26 <https://www.nytimes.com/2016/11/30/technology/how-snapchat-works.html>.

27 ²⁷⁵ *October 2022 Investor Presentation* at 5, Snap Inc. (Oct. 20, 2022), <https://investor.snap.com/events-and-presentations/presentations/default.aspx>.

28 ²⁷⁶ *Id.* at 6-7.

226. Snapchat initially became well known for its self-destructing content feature. In 2012, Snap added video-sharing capabilities, pushing the number of “snaps” to 50 million per day.²⁷⁷ A year later, Snap added the “Stories” function, which allows users to upload a rolling compilation of snaps that the user’s friends can view for 24 hours.²⁷⁸ The following year, Snap added a feature that enabled users to communicate with one another in real time via text or video.²⁷⁹ It also added the “Our Story” feature, expanding on the original stories function by allowing users in the same location to add their photos and videos to a single publicly viewable content stream.²⁸⁰ At the same time, Snap gave users the capability to add filters and graphic stickers onto photos indicating a user’s location through a feature it refers to as “Geofilters.”²⁸¹

227. In 2015, Snap added a “Discover” feature that promotes videos from news outlets and other content creators.²⁸² Users can watch that content by scrolling through the Discover feed. After the selected video ends, Snapchat automatically plays other video content in a continuous stream unless or until a user manually exits the stream.

228. In 2020, Snap added the “Spotlight” feature, through which it serves users “an endless feed of user-generated content” Snap curates from the 249 million daily Snapchat users.²⁸³

²⁷⁷ J.J. Colao, *Snapchat Adds Video, Now Seeing 50 million Photos A Day*, Forbes (Dec. 14, 2012), <https://www.forbes.com/sites/jjcolao/2012/12/14/snapchat-adds-video-now-seeing-50-million-photos-a-day/?sh=55425197631b>.

²⁷⁸ Ellis Hamburger, *Snapchat’s Next Big Thing: ‘Stories’ That Don’t Just Disappear*, The Verge (Oct. 3, 2013), <https://www.theverge.com/2013/10/3/4791934/snapchats-next-big-thing-stories-that-dont-just-disappear>.

²⁷⁹ Romain Dillet, *Snapchat Adds Ephemeral Text Chat and Video Calls*, TechCrunch (May 1, 2014), <https://techcrunch.com/2014/05/01/snapchat-adds-text-chat-and-video-calls/>.

²⁸⁰ Laura Stampler, *Snapchat Just Unveiled a New Feature*, Time (June 17, 2014), <https://time.com/2890073/snapchat-new-feature/>.

²⁸¹ Angela Moscaritolo, *Snapchat Adds ‘Geofilters’ in LA, New York*, PC Mag. (July 15, 2014), <https://www.pcmag.com/news/snapchat-adds-geofilters-in-la-new-york>.

²⁸² Steven Tweedie, *How to Use Snapchat’s New ‘Discover’ Feature*, Bus. Insider (Jan. 27, 2015), <https://www.businessinsider.com/how-to-use-snapchat-discover-feature-2015-1>.

²⁸³ Salvador Rodriguez, *Snap is launching a competitor to TikTok and Instagram Reels*, CNBC (Nov. 23, 2020), <https://www.cnbc.com/2020/11/23/snap-launching-a-competitor-to-tiktok-and-instagram-reels.html>.

1 **1. Snap Designs and Markets Its Platform to Appeal to a Youth**
 2 **Audience**

3 229. Snap specifically markets Snapchat to children aged 13 to 17 because they are a
 4 key demographic for Snap’s advertisers. Advertising is Snap’s primary source of revenue and is
 5 essential to its business model.

6 230. Snap began running advertisements on Snapchat in 2014.²⁸⁴ Since then, Snapchat’s
 7 business model has revolved around its advertising revenue, which has boomed. Snap now expects
 8 to generate \$4.86 billion in Snapchat advertising revenue for 2022.²⁸⁵

9 231. Internal documents describe users between the ages of 13 and 34 as “critical” to
 10 Snap’s advertising success because of the common milestones achieved within that age range.²⁸⁶

11 232. While Snap lumps teenagers in with younger adults in its investor materials, Snap’s
 12 marketing materials featuring young models reveal its priority market:
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23 ²⁸⁴ Sara Fischer, *A timeline of Snap’s advertising, from launch to IPO*, Axios (Feb. 3, 2017),
 24 <https://www.axios.com/2017/12/15/a-timeline-of-snaps-advertising-from-launch-to-ipo-1513300279>.

25 ²⁸⁵ Bhanvi Staija, *TikTok’s ad revenue to surpass Twitter and Snapchat combined in 2022*, Reuters
 26 (Apr. 11, 2022), <https://www.reuters.com/technology/tiktoks-ad-revenue-surpass-twitter-snapchat-combined-2022-report-2022-04-11/>.

27 ²⁸⁶ *October 2022 Investor Presentation at 27*, Snap Inc. (Oct. 20, 2022), [https://investor](https://investor.snap.com/events-and-presentations/presentations/default.aspx)
 28 [.snap.com/events-and-presentations/presentations/default.aspx](https://investor.snap.com/events-and-presentations/presentations/default.aspx).



233. In addition to its marketing, Snap has targeted a younger audience by designing Snapchat in a manner that older individuals find hard to use.²⁸⁷ The effect of this design is that

²⁸⁷ See Hannah Kuchler & Tim Bradshaw, *Snapchat's Youth Appeal Puts Pressure on Facebook*, Fin. Times (Aug. 21, 2017), <https://www.ft.com/content/07e4dc9e-86c4-11e7-bf50-e1c239b45787>.

1 Snapchat is a platform where its young users are insulated from older users, including their parents.
 2 As Snap's CEO explained, "[w]e've made it very hard for parents to embarrass their children."²⁸⁸

3 234. Snap also designed Snapchat as a haven for young users to hide content from their
 4 parents by ensuring that photos, videos, and chat messages quickly disappear. This design further
 5 insulates children from adult oversight.

6 235. Moreover, Snap added as a feature the ability for users to create cartoon avatars
 7 modeled after themselves.²⁸⁹ By using an art form generally associated with and directed at
 8 younger audiences, Snap further designed Snapchat to entice teenagers and younger children.

9 236. In 2013, Snap also marketed Snapchat specifically to children under 13 through a
 10 feature it branded "SnapKidz."²⁹⁰ This feature – part of the Snapchat platform – allowed children
 11 under 13 to take photos, draw on them, and save them locally on the device.²⁹¹ Children could
 12 also send these images to others or upload them to other social media sites.²⁹²

13 237. While the SnapKidz feature was later discontinued, and Snap purports to now
 14 prohibit users under the age of 13, its executives have admitted that its age verification "is
 15 effectively useless in stopping underage users from signing up to the Snapchat app."²⁹³

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 19 ²⁸⁸ Max Chafkin & Sarah Frier, *How Snapchat Built a Business by Confusing Olds*, Bloomberg
 20 (Mar. 3, 2016), <https://www.bloomberg.com/features/2016-how-snapchat-built-a-business/>.

21 ²⁸⁹ Kif Leswing, *Snapchat just introduced a feature it paid more than \$100 million for*, Bus.
 22 Insider (July 19, 2016), <https://www.businessinsider.com/snapchat-just-introduced-a-feature-it-paid-more-than-100-million-for-2016-7>.

23 ²⁹⁰ Larry Magid, *Snapchat Creates SnapKidz – A Sandbox for Kids Under 13*, Forbes (June 23,
 24 2013), <https://www.forbes.com/sites/larrymagid/2013/06/23/snapchat-creates-snapkidz-a-sandbox-for-kids-under-13/?sh=7c682a555e5a>.

25 ²⁹¹ *Id.*

26 ²⁹² *Id.*

27 ²⁹³ Isobel Asher Hamilton, *Snapchat admits its age verification safeguards are effectively useless*,
 28 Bus. Insider (Mar. 19, 2019), <https://www.businessinsider.com/snapchat-says-its-age-verification-safeguards-are-effectively-useless-2019-3>.

238. Snap's efforts to attract young users have been successful. Teenagers consistently name Snapchat as a favorite social media platform. The latest figures show that 13% of children aged 8 to 12 used Snapchat in 2021,²⁹⁴ and almost 60% of children aged 13 to 17 use Snapchat.²⁹⁵

2. Snap Intentionally Designs Exploitative Features to Keep Users on Its Platform for as Long as Possible

239. Snap has implemented inherently and intentionally exploitative features into Snapchat that are designed to keep users on its platform for as long as possible. These features include "Snapstreaks," various trophies and reward systems, quickly disappearing ("ephemeral") messages, and filters. Snap designed these features, along with others, to maximize the amount of time users spend on Snapchat.

240. Snaps are intended to manipulate users by activating the rule of reciprocation.²⁹⁶ Whenever a user gets a snap, they feel obligated to send a snap back. In addition, Snapchat tells users each time they receive a snap by pushing a notification to the recipient's cellphone. These notifications are designed to prompt users to open Snapchat and view content, increasing the amount of time users spend on Snapchat. Further, because snaps disappear within ten seconds of being viewed, users feel compelled to reply immediately. This disappearing nature of snaps is a defining characteristic of Snapchat and is intended to keep users on the platform.

241. Snap also keeps users coming back to the Snapchat platform through the "Snapstreaks" feature.²⁹⁷ A "streak" is a counter within Snapchat that tracks how many

²⁹⁴ Victoria Rideout et al., *Common Sense Census: Media use by tweens and teens*, Common Sense Media (2022), https://www.common sense media.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf at 5.

²⁹⁵ Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

²⁹⁶ Nir Eyal, *The Secret Psychology of Snapchat*, Nir and Far (Apr. 14, 2015), <https://www.nirandfar.com/psychology-of-snapchat/>.

²⁹⁷ See Avery Hartmans, *These are the sneaky ways apps like Instagram, Facebook, Tinder lure you in and get you 'addicted,'* Bus. Insider (Feb. 17, 2018), <https://www.businessinsider.com/how-app-developers-keep-us-addicted-to-our-smartphones-2018-1#snapchat-uses-snapstreaks-to-keep-you-hooked-13>; see generally Virginia Smart & Tyana Grundig, *'We're designing minds': Industry insider reveals secrets of addictive app trade*, CBC (Nov. 3, 2017), <https://www.cbc.ca/news/science/marketplace-phones-1.4384876>; Julian Morgans, *The Secret*

consecutive days two users have sent each other snaps. If a user fails to snap the other user within 24 hours, the streak ends. Snap adds extra urgency by putting an hourglass emoji next to a friend's name if a Snapchat streak is about to end.²⁹⁸ This design implements a system where a user must “check constantly or risk missing out.”²⁹⁹ This feature is particularly effective on teenage users. “For *teens in particular*, streaks are a vital part of using the app, and of their social lives as a whole.”³⁰⁰ Some children become so obsessed with maintaining a Snapstreak that they give their friends access to their accounts when they may be away from their phone for a day or more, such as on vacation.³⁰¹

242. Snap also designed features that operate on IVR principles to maximize the time users are on its platform. The “rewards” come in the form of a user’s “Snapscore” and other signals of recognition similar to “likes” used in other platforms. For example, a Snapscore increases with each snap a user sends and receives. The increase in score and other trophies and charms users can earn by using the app operate on variable reward patterns. Like Snapstreaks, these features are designed to incentivize sending snaps and increase the amount of time users spend on Snapchat.

Ways Social Media is Built for Addiction, Vice (May 17, 2017), <https://www.vice.com/en/article/vv5jkb/the-secret-ways-social-media-is-built-for-addiction>.

²⁹⁸ Lizette Chapman, *Inside the Mind of a Snapchat Streaker*, Bloomberg (Jan. 30, 2017), <https://www.bloomberg.com/news/features/2017-01-30/inside-the-mind-of-a-snapchat-streaker>.

²⁹⁹ *Id.*

³⁰⁰ Avery Hartmans, *These are the sneaky ways apps like Instagram, Facebook, Tinder lure you in and get you ‘addicted,’* Bus. Insider (Feb. 17, 2018), <https://www.businessinsider.com/how-app-developers-keep-us-addicted-to-our-smartphones-2018-1#snapchat-uses-snapstreaks-to-keep-you-hooked-13>; see generally Cathy Becker, *Experts warn parents how Snapchat can hook in teens with streaks*, ABC News (July 27, 2017), <https://abcnews.go.com/Lifestyle/experts-warn-parents-snapchat-hook-teens-streaks/story?id=48778296>.

³⁰¹ Caroline Knorr, *How to resist technology addiction*, CNN (Nov. 9, 2017), <https://www.cnn.com/2017/11/09/health/science-of-tech-obsession-partner/index.html>; Jon Brooks, *7 Specific Tactics Social Media Companies Use to Keep You Hooked*, KQED (June 9, 2017), <https://www.kqed.org/futureofyou/397018/7-specific-ways-social-media-companies-have-you-hooked>.

243. Snap also designs photo and video filters and lenses, which are central to Snapchat's function as a photo- and video-sharing social media platform. Snap designed its filters and lenses in a way to further maximize the amount of time users spend on Snapchat. One way Snap uses its filters to hook young users is by creating temporary filters that impose a sense of urgency to use them before they disappear. Another way Snap designed its filters to increase screen use is by gamification. Many filters include games,³⁰² creating competition between users by sending each other snaps with scores. Further, Snap tracks data on the most commonly used filters and develops new filters based on this data.³⁰³ Snap also personalizes filters to further entice individuals to use Snapchat more.³⁰⁴ Snap designs and modifies these filters to maximize the amount of time users spend on Snapchat.

244. Snap also uses complex algorithms to keep users engaged with Snapchat by suggesting friends to users and recommending new content.

245. Snap notifies users based on an equation Snap uses to determine whether someone should add another user as a friend on Snapchat. This is known as "Quick Add." By using an algorithm to suggest friends to users, Snapchat increases the odds users will add additional friends, send additional snaps, and spend more time on the app.

246. Snapchat also contains "Discover" and "Spotlight" features that use algorithms to recommend content to users. The Discover feature includes content from news and other media outlets.³⁰⁵ A user's Discover page is populated by an algorithm and constantly changes depending on how a user interacts with the content.³⁰⁶ Similarly, the Spotlight feature promotes popular

³⁰² Josh Constance, *Now Snapchat Has 'Filter Games,'* TechCrunch (Dec. 23, 2016), <https://techcrunch.com/2016/12/23/snapchat-games/>.

³⁰³ *How We Use Your Information*, Snap Inc., <https://snap.com/en-US/privacy/your-information> (last visited Feb. 27, 2023).

³⁰⁴ *Id.*

³⁰⁵ Steven Tweedie, *How to Use Snapchat's New 'Discover' Feature*, Bus. Insider (Jan. 27, 2015), <https://www.businessinsider.com/how-to-use-snapchat-discover-feature-2015-1>.

³⁰⁶ *How We Use Your Information*, Snap Inc., <https://snap.com/en-US/privacy/your-information> (last visited Feb. 27, 2023).

1 videos from other Snapchat users and is based on an algorithm that determines whether a user has
 2 positively or negatively engaged with similar content.³⁰⁷ Snap programs its algorithms to push
 3 content to users that will keep them engaged on Snapchat and thereby increases the amount of time
 4 users spend on Snapchat, worsening their mental health.

5 **3. Snap's Conduct in Designing and Operating Its Platform Has** 6 **Harmed Youth Mental Health**

7 247. The way in which Snap has designed and operated Snapchat has caused youth to
 8 suffer increased anxiety, depression, disordered eating, cyberbullying, and sleep deprivation.

9 248. Snap knows Snapchat is harming youth because, as alleged above, Snap
 10 intentionally designed Snapchat to maximize engagement by preying on the psychology of
 11 children through its use of algorithms and other features including Snapstreaks, various trophies
 12 and reward systems, quickly disappearing messages, filters, and games.

13 249. Snap should know that its conduct has negatively affected youth. Snap's conduct
 14 has been the subject of inquiries by the United States Senate regarding Snapchat's use "to promote
 15 bullying, worsen eating disorders and help teens buy dangerous drugs or engage in reckless
 16 behavior."³⁰⁸ Further, Senators from across the ideological spectrum have introduced bills that
 17 would ban many of the features Snapchat uses, including badges and other awards recognizing a
 18 user's level of engagement with the platform.³⁰⁹

19 250. In fact, in anticipation of a hearing with Snapchat before the Senate Subcommittee
 20 on Consumer Protection, Product Safety, and Data Security on the subject of "protecting kids
 21

22 ³⁰⁷ Sara Fischer, *Snapchat launches Spotlight, a TikTok competitor*, Axios (Nov. 23, 2020),
 23 <https://www.axios.com/2020/11/23/snapchat-launches-spotlight-tiktok-competitor>; *How We Use Your Information*, Snap Inc., <https://snap.com/en-US/privacy/your-information> (last visited Feb. 27, 2023)

24 ³⁰⁸ Bobby Allyn, *4 takeaways from the Senate child safety hearing with YouTube, Snapchat and*
 25 *TikTok*, Nat'l Pub. Radio (Oct. 26, 2021), <https://www.npr.org/2021/10/26/1049267501/snapchat-tiktok-youtube-congress-child-safety-hearing>.

26 ³⁰⁹ See Abigail Clukey, *Lawmaker Aims To Curb Social Media Addiction With New Bill*, Nat'l
 27 Pub. Radio (Aug. 3, 2019), <https://www.npr.org/2019/08/03/747086462/lawmaker-aims-to-curb-social-media-addiction-with-new-bill>; *Social Media Addiction Reduction Technology Act*, S. 2314, 116th Cong. (2019); *Kids Internet Design and Safety Act*, S. 2918, 117th Cong. (2021).

online,” Senator Michael Lee had his staff create a Snapchat account for a 15-year-old child. The staff did not select any content preferences for the account and simply entered a name, birth year, and email address. When they opened the Discover page, “they were immediately bombarded with content that was . . . wildly inappropriate for a child, including recommendations for, among other things, an invite to play an online sexualized video game that is marketed itself to people who are 18 and up, tips on why ‘you shouldn’t go to bars alone,’ notices for video games that are rated for ages 17 and up, and articles about porn stars.”³¹⁰ Despite these calls for oversight from Congress, Snap has failed to curtail its use of streaks, badges, and other awards that recognize users’ level of engagement with Snapchat.

251. Snap also knows or should know of Snapchat’s other negative effects on youth because of published research findings. For instance, the *Journal of the American Medical Association* has recognized that Snapchat’s effect on how young people view themselves is so severe that it named a new disorder, “Snapchat dysmorphia,” after the platform.³¹¹ This disorder describes people, usually young women, seeking plastic surgery to make themselves look the way they do through Snapchat filters.³¹² The rationale underlying this disorder is that beauty filters on social media, like Snapchat, create a “sense of unattainable perfection” that is alienating and damaging to a person’s self-esteem.³¹³ One social psychologist summed up the effect this way: “[T]he pressure to present a certain filtered image on social media can certainly play into [depression and anxiety] for younger people who are just developing their identities.”³¹⁴

³¹⁰ *Protecting Kids Online: Snapchat, TikTok, and YouTube*, Hearing Before the Subcommittee on Consumer Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021), <https://www.commerce.senate.gov/2021/10/protecting-kids-online-snapchat-tiktok-and-youtube>.

³¹¹ ‘Snapchat Dysmorphia’: When People Get Plastic Surgery To Look Like A Social Media Filter, WBUR (Aug 29, 2018), <https://www.wbur.org/hereandnow/2018/08/29/snapchat-dysmorphia-plastic-surgery>.

³¹² *Id.*

³¹³ Nathan Smith & Allie Yang, *What happens when lines blur between real and virtual beauty through filters?*, ABC News (May 1, 2021), <https://abcnews.go.com/Technology/lines-blur-real-virtual-beauty-filters/story?id=77427989>.

³¹⁴ *Id.*

252. Despite knowing Snapchat harms its young users, Snap continues to update and add features intentionally designed to maximize the amount of time users spend on Snapchat. Snap continues its harmful conduct because its advertising revenue relies on Snapchat's users consuming large volumes of content on its platform.

J. TikTok's Social Media Platform Has Substantially Contributed to the Youth Mental Health Crisis

253. TikTok is a social media platform that describes itself as "the leading destination for short-form mobile video."³¹⁵ According to TikTok, it is primarily a platform where users "create and watch short-form videos."³¹⁶

254. TikTok's predecessor, Musical.ly, launched in 2014 as a place where people could create and share 15-second videos of themselves lip-syncing or dancing to their favorite music.³¹⁷

255. In 2017, ByteDance launched an international version of a similar platform that also enabled users to create and share short lip-syncing videos that it called TikTok.³¹⁸

256. That same year, ByteDance acquired Musical.ly to leverage its young user base in the United States of almost 60 million monthly active users.³¹⁹

³¹⁵ *About: Our Mission*, TikTok, <https://www.tiktok.com/about> (last visited Feb. 27, 2023).

³¹⁶ *Statement of Michael Beckerman, Vice President and Head of Public Policy*, Protecting Kids Online: Snapchat, TikTok, and YouTube: Hearing Before the Subcommittee on Consumer Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021), <https://www.commerce.senate.gov/services/files/8C751FF4-A1FD-4FCA-80F6-C84BEB04C2F9>.

³¹⁷ Biz Carson, *How a failed education startup turned into Musical.ly, the most popular app you've probably never heard of*, Bus. Insider (May, 28, 2016), <https://www.businessinsider.com/what-is-musically-2016-5>.

³¹⁸ Paresh Dave, *China's ByteDance scrubs Musical.ly brand in favor of TikTok*, Reuters (Aug. 1, 2018), <https://www.reuters.com/article/us-bytedance-musically/chinas-bytedance-scrubs-musical-ly-brand-in-favor-of-tiktok-idUSKBN1KN0BW>.

³¹⁹ Liza Lin & Rolfe Winkler, *Social-Media App Musical.ly Is Acquired for as Much as \$1 billion; With 60 million monthly users, startup sells to Chinese maker of news app Toutiao*, Wall St. J. (Nov. 10, 2017), <https://www.wsj.com/articles/lip-syncing-app-musical-ly-is-acquired-for-as-much-as-1-billion-1510278123>.

1 257. Months later, the apps were merged under the TikTok brand.³²⁰

2 258. Since then, TikTok has expanded the length of time for videos from 15 seconds to
3 up to 10 minutes;³²¹ created a fund that was expected to grow to over \$1 billion within three years
4 to incentivize users to create videos that even more people will watch;³²² and had users debut their
5 own songs, share comedy skits,³²³ and “challenge” others to perform an activity.³²⁴

6 259. TikTok has designed its platform to facilitate bottomless scrolling with a never-
7 ending stream of videos.

8 260. “[O]ne of the defining features of the TikTok platform” is its “For You” feed.³²⁵
9 This is a space within the platform where TikTok offers content supposedly curated for them based
10 on complex, machine-learning algorithms intended to keep users on its platform. TikTok itself
11 describes the feed as “central to the TikTok experience and where most of our users spend their
12 time.”³²⁶ *The New York Times* described it this way:

13 It’s an algorithmic feed based on videos you’ve interacted with, or even just
14 watched. It never runs out of material. It is not, unless you train it to be, full of
15 people you know, or things you’ve explicitly told it you want to see. It’s full of
16

17 ³²⁰ Paresh Dave, *China’s ByteDance scrubs Musical.ly brand in favor of TikTok*, Reuters (Aug. 1,
18 2018), <https://www.reuters.com/article/us-bytedance-musically/chinas-bytedance-scrubs-musical-ly-brand-in-favor-of-tiktok-idUSKBN1KN0BW>.

19 ³²¹ Andrew Hutchinson, *TikTok Confirms that 10 Minute Video Uploads are Coming to All Users*,
20 SocialMediaToday (Feb. 28, 2022), <https://www.socialmediatoday.com/news/tiktok-confirms-that-10-minute-video-uploads-are-coming-to-all-users/619535/>.

21 ³²² Vanessa Pappas, *Introducing the \$200M TikTok Creator Fund*, TikTok (July 29, 2021),
22 <https://newsroom.tiktok.com/en-us/introducing-the-200-million-tiktok-creator-fund>.

23 ³²³ Joseph Steinberg, *Meet Musical.ly, the Video Social Network Quickly Capturing the Tween*
24 *and Teen Markets*, Inc. (June 2, 2016), <https://www.inc.com/joseph-steinberg/meet-musically-the-video-social-network-quickly-capturing-the-tween-and-teen-m.html>.

25 ³²⁴ John Herrman, *How TikTok is Rewriting the World*, N.Y. Times (Mar. 10, 2019),
<https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>.

26 ³²⁵ *How TikTok recommends videos #ForYou*, TikTok (June 18, 2020), <https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you>.
27

28 ³²⁶ *Id.*

1 things that you seem to have demonstrated you want to watch, no matter what you
2 actually say you want to watch.³²⁷

3 261. The “For You” feed has successfully garnered TikTok hundreds of millions of
4 users. Since 2018, TikTok has grown from 271 million global users to more than 1 billion global
5 monthly users as of September 2021.³²⁸ As of July 2020, “TikTok classified more than a third of
6 its 49 million daily users in the United States as being 14 years old or younger,” and that likely
7 underestimates those under 14 and older teenagers (*i.e.*, those between 15 and 18 years old)
8 because TikTok claims not to know how old a third of its daily users are.³²⁹ According to data
9 from parental control software Qustodio, youth aged 4 through 18 spend an average of 1 hour and
10 47 minutes per day on TikTok.³³⁰

11 **1. TikTok Designs and Markets Its Platform to Appeal to a Youth Audience**

12 262. TikTok, like the other Defendants’ platforms, has built its business plan around
13 advertising revenue, which has boomed. In 2022, TikTok is projected to receive \$11 billion in
14 advertising revenue, over half of which (*i.e.*, \$6 billion) is expected to come from the United
15 States.³³¹

16 263. TikTok, since its inception as Musical.ly, has been designed and developed with
17 youth in mind.
18
19

20 ³²⁷ John Herrman, *How TikTok is Rewriting the World*, N.Y. Times (Mar. 10, 2019),
21 <https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>.

22 ³²⁸ Jessica Bursztynsky, *TikTok says 1 billion people use the app each month*, CNBC (Sept. 27,
2021), <https://www.cnbc.com/2021/09/27/tiktok-reaches-1-billion-monthly-users.html>.

23 ³²⁹ Raymond Zhong & Sheera Frenkel, *A Third of TikTok’s U.S. Users May Be 14 or Under,*
24 *Raising Safety Questions*, N.Y. Times (Sept. 17, 2020), <https://www.nytimes.com/2020/08/14/technology/tiktok-underage-users-ftc.html>.

25 ³³⁰ *Annual Data Report 2022, From Alpha to Z: raising the digital generations*, Qustodio, at 15
26 (2023), <https://www.qustodio.com/en/from-alpha-to-z-raising-the-digital-generations/>.

27 ³³¹ Bhanvi Staija, *TikTok’s ad revenue to surpass Twitter and Snapchat combined in 2022*, Reuters
28 (Apr. 11, 2022), <https://www.reuters.com/technology/tiktoks-ad-revenue-surpass-twitter-snapchat-combined-2022-report-2022-04-11/>.

1 264. Alex Zhu (“Zhu”) and Louis Yang (“Yang”), the co-founders of Musical.ly, raised
 2 \$250,000 to build an app that experts could use to create short three- to five-minute videos
 3 explaining a subject.³³² The day they released the app, Zhu said they knew “[i]t was doomed to
 4 be a failure” because “[i]t wasn’t entertaining, and it didn’t attract teens.”³³³

5 265. According to Zhu, he stumbled upon the idea that would become known as TikTok
 6 while observing teens on a train, half of whom were listening to music, while the other half took
 7 selfies or videos and shared the results with friends.³³⁴ “That’s when Zhu realized he could
 8 combine music, videos, and a social network to attract the early-teen demographic.”³³⁵

9 266. Zhu and Yang thereafter developed the short-form video app that is now known as
 10 TikTok, which commentators have observed “encourages a youthful audience in subtle and
 11 obvious ways.”³³⁶

12 267. Among the more subtle ways the app was marketed to youth are its design and
 13 content. For example, the Federal Trade Commission (“FTC”) alleged that the app: (a) initially
 14 centered around a child-oriented activity (*i.e.*, lip syncing); (b) featured music by celebrities that
 15 then appealed primarily to teens and tweens, such as Selena Gomez and Ariana Grande; (c) labeled
 16 folders with names meant to appeal to youth, such as “Disney” and “school”; and (d) included
 17 songs in such folders related to Disney television shows and movies, such as “Can You Feel the
 18 Love Tonight” from the movie “The Lion King” and “You’ve Got a Friend in Me” from the movie
 19
 20
 21

22 ³³² Biz Carson, *How a failed education startup turned into Musical.ly, the most popular app*
 23 *you’ve probably never heard of*, Bus. Insider (May 28, 2016), <https://www.businessinsider.com/what-is-musically-2016-5>.

24 ³³³ *Id.*

25 ³³⁴ *Id.*

26 ³³⁵ *Id.*

27 ³³⁶ John Herrman, *Who’s Too Young for an App? Musical.ly Tests the Limits*, N.Y. Times
 28 (Sept. 16, 2016), <https://www.nytimes.com/2016/09/17/business/media/a-social-network-frequented-by-children-tests-the-limits-of-online-regulation.html>.

1 “Toy Story” and songs covering school-related subjects or school-themed television shows and
2 movies.³³⁷

3 268. The target demographic was also reflected in the sign-up process. In 2016, the
4 birthdate for those signing up for the app defaulted to the year 2000 (*i.e.*, 16 years old).³³⁸

5 269. TikTok also cultivated a younger demographic in unmistakable, albeit concealed,
6 ways. In 2020, *The Intercept* reported on a document TikTok prepared for its moderators. In the
7 document, TikTok instructs its moderators that videos of senior people with “too many wrinkles”
8 are disqualified for the “For You” feed because that would make “the video . . . much less
9 attractive [and] not worth[] . . . recommend[ing.]”³³⁹

10 270. In December 2016, Zhu confirmed the company had actual knowledge that a lot of
11 their users are under 13, including some top users.³⁴⁰

12 271. The FTC alleged that despite the company’s knowledge of these and a “significant
13 percentage” of other users who were under 13, the company failed to comply with COPPA.³⁴¹

14 272. TikTok settled those claims in 2019 by agreeing to pay what was then the largest-
15 ever civil penalty under COPPA and to several forms of injunctive relief.³⁴²

16
17
18 ³³⁷ Complaint for Civil Penalties, Permanent Injunction, and Other Equitable Relief at ¶¶26-27,
19 *United States v. Musical.ly*, No. 2:19-cv-01439-ODW-RAO, ECF 1 (“*Musical.ly* Complaint”) (C.D. Cal. Feb. 27, 2019).

20 ³³⁸ Melia Robinson, *How to use Musical.ly, the app with 150 million users that teens are obsessed*
21 *with*, *Bus. Insider* (Dec. 7, 2016), <https://www.businessinsider.com/how-to-use-musically-app-2016-12>.

22 ³³⁹ Sam Biddle et al., *Invisible Censorship: TikTok Told Moderators to Suppress Posts by “Ugly”*
23 *People and the Poor to Attract New Users*, *The Intercept* (Mar. 15, 2020),
<https://theintercept.com/2020/03/16/tiktok-app-moderators-users-discrimination/>.

24 ³⁴⁰ Jon Russell, *Muscal.ly defends its handling of young users, as it races past 40M MAUs at*
25 *8:58-11:12*, *TechCrunch* (Dec. 6, 2016), <https://techcrunch.com/2016/12/06/musically-techcrunch-disrupt-london/>.

26 ³⁴¹ See generally *Musical.ly* Complaint, ¶19.

27 ³⁴² Lesley Fair, *Largest FTC COPPA settlement requires Musical.ly to change its tune*, *FTC* (Feb.
28 27, 2019), <https://www.ftc.gov/business-guidance/blog/2019/02/largest-ftc-coppa-settlement-requires-musically-change-its-tune>.

273. In an attempt to come into compliance with the consent decree and COPPA, TikTok made available to users under 13 what it describes as a “‘limited, separate app experience.’”³⁴³ The child version of TikTok restricts users from posting videos through the app. Children can still, however, record and watch videos on TikTok.³⁴⁴ For that reason, experts fear the app is “‘designed to fuel [children’s] interest in the grown-up version.’”³⁴⁵

274. These subtle and obvious ways TikTok markets to and obtained a young user base are manifestations of Zhu’s views about the importance of user engagement to growing TikTok. Zhu explained the target demographic to *The New York Times*: “[T]eenage culture doesn’t exist” in China because “‘teens are super busy in school studying for tests, so they don’t have the time and luxury to play social media apps.’”³⁴⁶ By contrast, Zhu describes “[t]eenagers in the U.S. [as] a golden audience.”³⁴⁷

275. TikTok’s efforts to attract young users have been successful. Over 67% of children aged 13 to 17 report having used the TikTok app.³⁴⁸

2. TikTok Intentionally Designs Features to Keep Users on Its Platform for as Long as Possible

276. Like the other Defendants’ social media platforms, TikTok developed features that exploit psychological phenomenon such as IVRs and reciprocity to maximize the time users spend on its platform.

³⁴³ Dami Lee, *TikTok stops young users from uploading videos after FTC settlement*, The Verge (Feb. 27, 2019), <https://www.theverge.com/2019/2/27/18243510/tiktok-age-young-user-videos-ftc-settlement-13-childrens-privacy-law>.

³⁴⁴ *Id.*

³⁴⁵ Leonard Sax, *Is TikTok Dangerous for Teens?*, Inst. for Fam. Stud. (Mar. 29, 2022), <https://ifstudies.org/blog/is-tiktok-dangerous-for-teens->.

³⁴⁶ Paul Mozur, *Chinese Tech Firms Forced to Choose Market: Home or Everywhere Else*, N.Y. Times (Aug. 9, 2016), <https://www.nytimes.com/2016/08/10/technology/china-homegrown-internet-companies-rest-of-the-world.html>.

³⁴⁷ *Id.*

³⁴⁸ Emily Vogels et al., *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

277. TikTok employs design elements and complex algorithms to simulate variable reward patterns in a flow-inducing stream of short-form videos intended to captivate its users' attention well after they are satiated.

278. TikTok drives habitual use of its platform using design elements that operate on principles of IVRs. For example, TikTok designed its platform to allow users to like and reshare videos. Those features serve as rewards for users who create content on the platform. Receiving a like or reshare indicates that others approve of that user's content and satisfies their natural desire for acceptance.³⁴⁹ Studies have shown that "likes" activate the reward region of the brain.³⁵⁰ The release of dopamine in response to likes creates a positive feedback loop.³⁵¹ Users will use TikTok again and again in the hope of another pleasurable experience.³⁵²

279. TikTok also uses reciprocity to manipulate users to use the platform. TikTok invokes reciprocity through features like "Duet." The Duet feature allows users to post a video side by side with a video from another TikTok user. Users use Duet as a way to react to the videos of TikTok content creators. The response is intended to engender a reciprocal response from the creator of the original video.

280. TikTok, like Snapchat, offers video filters, lenses, and music, which are intended to keep users on its platform. Also, like Snapchat, TikTok has gamified its platform through "challenges." These challenges are essentially campaigns in which users compete to perform a specific task. By fostering competition, TikTok incentivizes users to use its platform.

³⁴⁹ See, e.g., Lauren E. Sherman et al., *The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media*, 27(7) Psych. Sci. 1027-35 (July 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5387999/>.

³⁵⁰ *Id.*

³⁵¹ Rasan Burhan & Jalal Moradzadeh, *Neurotransmitter Dopamine (DA) and its Role in the Development of Social Media Addiction*, 11(7) J. Neurology & Neurophysiology 507 (2020), <https://www.iomcworld.org/open-access/neurotransmitter-dopamine-da-and-its-role-in-the-development-of-social-media-addiction.pdf>.

³⁵² *Id.*

281. TikTok’s defining feature, its “For You” feed, is a curated, never-ending stream of short-form videos intended to keep users on its platform. In that way, TikTok feeds users beyond the point they are satiated. The ability to scroll *ad infinitum*, coupled with the variable reward pattern of TikTok, induces a flow-like state for users that distorts their sense of time.³⁵³ That flow is yet another way TikTok increases the time users spend on its platform.

282. Like other Defendants, TikTok employs algorithms to keep users engaged. For instance, the first thing users see when they open TikTok is the “For You” feed even if they have never posted anything, followed anyone, or liked a video.³⁵⁴

283. The “For You” page presents users with a “stream of videos” TikTok claims are “curated to [each user’s] interests.”³⁵⁵

284. According to TikTok, it populates each user’s “For You” feed by “ranking videos based on a combination of factors” that include, among others, any interests expressed when a user registers a new account, videos a user likes, accounts they follow, hashtags, captions, sounds in a video they watch, and certain device settings such as their language preferences and where they are located.³⁵⁶

285. Critically, some factors weigh heavier than others. To illustrate, TikTok explains that an indicator of interest, such as “whether a user finishes watching a longer video from beginning to end, would receive greater weight than a weak indicator, such as whether the video’s viewer and creator are both in the same country.”³⁵⁷

³⁵³ Christian Montag et al., *Addictive Features of Social Media/Messenger Platforms and Freemium Games against the Background of Psychological and Economic Theories*, 16(14) Int’l J. Env’t Rsch. & Pub. Health 2612 (July 23, 2019), <https://doi.org/10.3390/ijerph16142612>.

³⁵⁴ Brian Feldman, *TikTok is Not the Internet’s Eden*, N.Y. Mag. (Mar. 16, 2020), <https://nymag.com/intelligencer/2020/03/tiktok-didnt-want-you-to-see-ugly-or-poor-people-on-its-app.html>.

³⁵⁵ *How TikTok recommends videos #ForYou*, TikTok (June 18, 2020), <https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you>.

³⁵⁶ *Id.*

³⁵⁷ *Id.*

1 286. TikTok claims it ranks videos in this way because the length of time a user spends
2 watching a video is a “strong indicator of interest.”³⁵⁸

3 287. However, Zhu offered a different explanation. He repeatedly told interviewers that
4 he was “focused primarily on increasing the engagement of existing users.”³⁵⁹ ““Even if you have
5 tens of millions of users,”” Zhu explained, ““you have to keep them *always* engaged.””³⁶⁰

6 288. The decisions TikTok made in programming its algorithms are intended to do just
7 that, as TikTok candidly explained in an internal document titled, “TikTok Algo 101.” The
8 document, which TikTok has confirmed is authentic, “explains frankly that in the pursuit of the
9 company’s ‘ultimate goal’ of adding daily active users, it has chosen to optimize for two closely
10 related metrics in the stream of videos it serves: ‘retention’ – that is, whether a user comes back –
11 and ‘time spent.’”³⁶¹

12 289. ““This system means that watch time is key.””³⁶² Chaslot, the founder of Algo
13 Transparency, who reviewed the document at the request of *The New York Times*, explained:
14 ““[R]ather than giving [people] what they really want,”” TikTok’s “algorithm tries to get people
15 addicted.””³⁶³

16 290. Put another way, the algorithm, coupled with the design elements, conditions users
17 through reward-based learning processes to facilitate the formation of habit loops that encourage
18 excessive use.

20 ³⁵⁸ *Id.*

21 ³⁵⁹ Joseph Steinberg, *Meet Musical.ly, the Video Social Network Quickly Capturing the Tween*
22 *and Teen Markets*, Inc. (June 2, 2016), [https://www.inc.com/joseph-steinberg/meet-musically-the-](https://www.inc.com/joseph-steinberg/meet-musically-the-video-social-network-quickly-capturing-the-tween-and-teen-m.html)
[video-social-network-quickly- capturing-the-tween-and-teen-m.html](https://www.inc.com/joseph-steinberg/meet-musically-the-video-social-network-quickly-capturing-the-tween-and-teen-m.html).

23 ³⁶⁰ Biz Carson, *How a failed education startup turned into Musical.ly, the most popular app*
24 *you’ve probably never heard of*, Bus. Insider (May 28, 2016), [https://www.businessinsider.com/](https://www.businessinsider.com/what-is-musically-2016-5)
[what-is-musically-2016-5](https://www.businessinsider.com/what-is-musically-2016-5) (emphasis added).

25 ³⁶¹ Ben Smith, *How TikTok Reads Your Mind*, N.Y. Times (Dec. 5, 2021),
26 <https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html>.

27 ³⁶² *Id.*

28 ³⁶³ *Id.*

291. The end result is that TikTok uses “a machine-learning system that analyzes each video and tracks user behavior so it can serve up a continually refined, never-ending stream of TikToks optimized to hold [users’] attention.”³⁶⁴

3. TikTok’s Conduct in Designing and Operating Its Platform Has Harmed Youth Mental Health

292. TikTok’s decision to program its algorithms to prioritize user engagement causes harmful and exploitative content to be amplified to the young market it has cultivated.

293. TikTok’s prioritization of user engagement amplifies the spread of misinformation and content that promotes hate speech and self-harm. The Integrity Institute, a nonprofit organization of engineers, product managers, data scientists, and others, has demonstrated how prioritizing user engagement amplifies misinformation on TikTok and other platforms.³⁶⁵ That pattern, the Integrity Institute notes, is “true for a broad range of harms,” including hate speech and self-harm content, in addition to misinformation.³⁶⁶

294. The Integrity Institute’s analysis builds on a premise Mark Zuckerberg (“Zuckerberg”), CEO of Facebook, described as the “Natural Engagement Pattern.”³⁶⁷

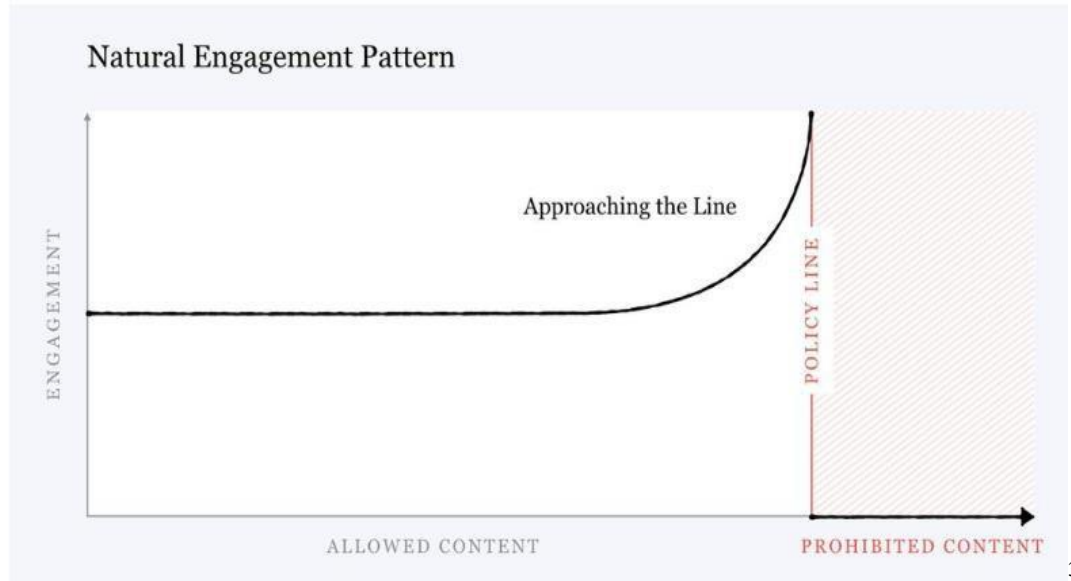
295. The chart below shows that as content gets closer and closer to becoming harmful, on average, it gets more engagement:

³⁶⁴ Jia Tolentino, *How TikTok Holds Our Attention*, New Yorker (Sept. 23, 2019), <https://www.newyorker.com/magazine/2019/09/30/how-tiktok-holds-our-attention>.

³⁶⁵ Jeff Allen, *Misinformation Amplification Analysis and Tracking Dashboard*, Integrity Inst. (Oct. 13, 2022), <https://integrityinstitute.org/our-ideas/hear-from-our-fellows/misinformation-amplification-tracking-dashboard>; *see also* Steven Lee Myers, *How Social Media Amplifies Misinformation More Than Information*, N.Y. Times (Oct. 13, 2022), <https://www.nytimes.com/2022/10/13/technology/misinformation-integrity-institute-report.html>.

³⁶⁶ Jeff Allen, *Misinformation Amplification Analysis and Tracking Dashboard*, Integrity Inst. (Oct. 13, 2022), <https://integrityinstitute.org/our-ideas/hear-from-our-fellows/misinformation-amplification-tracking-dashboard>.

³⁶⁷ *Id.*



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296. According to Zuckerberg: “[N]o matter where we draw the lines for what is allowed, as a piece of content gets close to that line, people will engage with it more on average.”³⁶⁹

297. This has important implications for any social media platform design, as the Integrity Institute explains:

[W]hen platforms use machine learning models to predict user engagement on content, we should expect the predicted engagement to follow the actual engagement. When those predictions are used to rank and recommend content, specifically when a higher predicted engagement score means the content is more likely to be recommended or placed at the top of feeds, then we expect that misinformation will be preferentially distributed and amplified on the platform.³⁷⁰

298. Put differently, if you use past engagement to predict future engagement, as TikTok does, you are most likely to populate users “For You” feed with harmful content.

299. The Integrity Institute tested its theory by analyzing the spread of misinformation on TikTok. Specifically, the Integrity Institute compared the amount of engagement (e.g., number

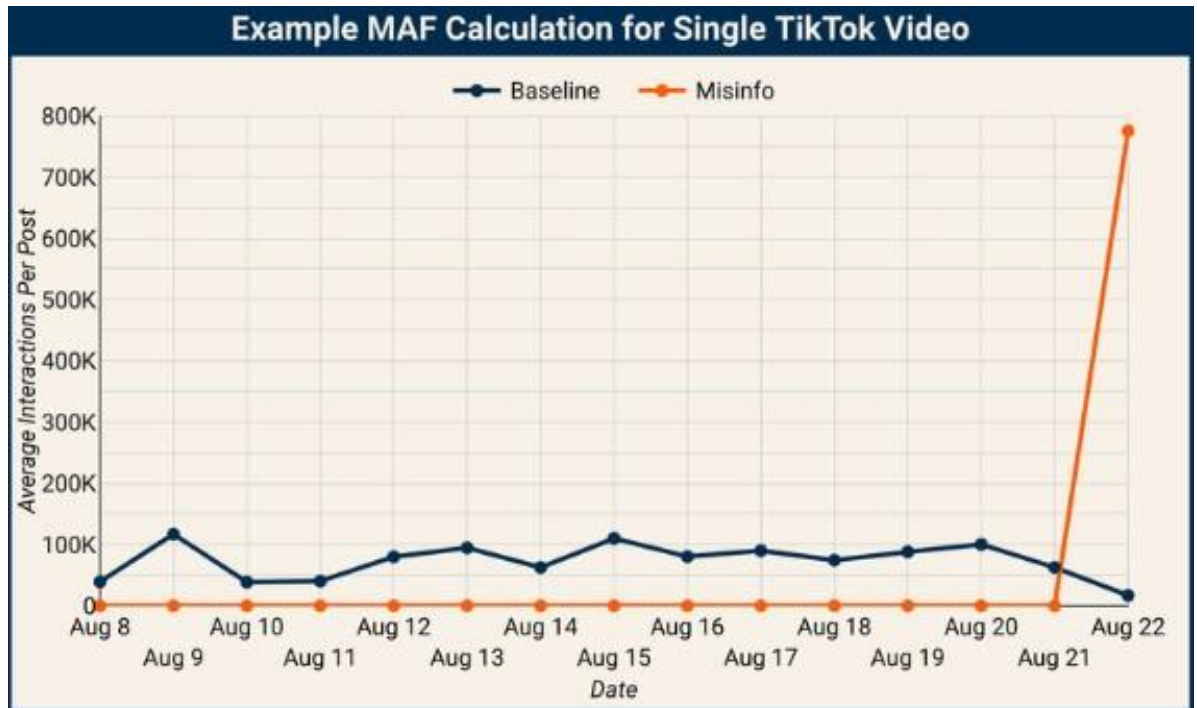
³⁶⁸ Mark Zuckerberg, *A Blueprint for Content Governance and Enforcement*, Facebook (May 5, 2021), <https://www.facebook.com/notes/751449002072082>.

³⁶⁹ *Id.*

³⁷⁰ *Misinformation Amplification Analysis and Tracking Dashboard*, Integrity Inst. (Oct. 13, 2022), <https://integrityinstitute.org/our-ideas/hear-from-our-fellows/misinformation-amplification-tracking-dashboard>.

of views) received by a post containing misinformation as compared to prior posts from the same content creator.³⁷¹

300. For example, a TikTok user's historical posts received on average 75,000 views. When that same user posted a false statement (as determined by the International Fact Checking Network), the post received 775,000 views. In this case, TikTok amplified the misinformation ten times more than this user's typical content.³⁷²



301. After analyzing many other posts from other users, the Integrity Institute found that TikTok on average amplified misinformation 29 times more than other content.³⁷³

302. A separate investigation by *NewsGuard* found TikTok's search algorithm similarly amplified misinformation. TikTok's search engine, like its "For You" feed, is a favorite among

³⁷¹ *Id.*

³⁷² *Id.*

³⁷³ *Id.*

1 youth, with 40% preferring it (and Instagram) over Google.³⁷⁴ Unfortunately, *NewsGuard* found
 2 that one in five of the top 20 TikTok search results on prominent news topics, such as school
 3 shootings and COVID-19 vaccines, contain misinformation.³⁷⁵

4 303. Misinformation is just one type of harmful content TikTok amplifies to its young
 5 users. Investigations by *The Wall Street Journal* found TikTok inundated young users with videos
 6 about depression, self-harm, drugs, and extreme diets, to name a few.

7 304. In one investigation, *The Wall Street Journal* found TikTok's algorithm quickly
 8 pushed users down rabbit holes where they were more likely to encounter harmful content. *The*
 9 *Wall Street Journal* investigated how TikTok's algorithm chose what content to promote to users
 10 by having 100 bots scroll through the "For You" feed.³⁷⁶ Each bot was programmed with interests,
 11 such as extreme sports, forestry, dance, astrology, and animals.³⁷⁷ Those interests were not
 12 disclosed in the process of registering their accounts.³⁷⁸ Rather, the bots revealed their interests
 13 through their behaviors, specifically the time they spent watching the videos TikTok recommended
 14 to them. Consistent with TikTok's internal "Algo 101" document, *The Wall Street Journal* found
 15 time spent watching videos was "the most impactful data on [what] TikTok serves you."³⁷⁹

20 ³⁷⁴ Wanda Pogue, *Move Over Google. TikTok Is the Go-To Search Engine for Gen Z*, Adweek
 21 (Aug. 4, 2022), <https://www.adweek.com/social-marketing/move-over-google-tiktok-is-the-go-to-search-engine-for-gen-z/>.

22 ³⁷⁵ Jack Brewster et al., *Misinformation Monitor; September 2022*, NewsGuard,
 23 <https://www.newsguardtech.com/misinformation-monitor/september-2022/> (last visited Feb. 26, 2023).

24 ³⁷⁶ *Inside TikTok's Algorithm: A WSJ Video Investigation*, Wall St. J. (July 21, 2021),
 25 <https://www.wsj.com/articles/tiktok-algorithm-video-investigation-11626877477>.

26 ³⁷⁷ *Id.*

27 ³⁷⁸ *Id.*

28 ³⁷⁹ *Id.*

1 305. Over the course of 36 minutes, one bot watched 224 videos, lingering over videos
2 with hashtags for “depression” or “sad.”³⁸⁰ From then on, 93% of the videos TikTok showed this
3 account were about depression or sadness.³⁸¹

4 306. That is not an outlier. Former YouTube engineer Guillaume Chaslot, who worked
5 on the algorithm for YouTube, explained that 90% to 95% of the content users see on TikTok is
6 based on its algorithm.³⁸²

7 307. “[E]ven bots with general mainstream interests got pushed to the margin as the
8 recommendations got more personalized and narrow.”³⁸³ Deep in these rabbit holes, *The Wall*
9 *Street Journal* found “users are more likely to encounter potential harmful content.”³⁸⁴

10 308. Chaslot explained why TikTok feeds users this content:

11 [T]he algorithm is able to find the piece of content that you’re vulnerable to. That
12 will make you click, that will make you watch, but it doesn’t mean you really like
13 it. And that it’s the content that you enjoy the most. It’s just the content that’s most
likely to make you stay on the platform.³⁸⁵

14 309. A follow-up investigation by *The Wall Street Journal* using bots found “that
15 through its powerful algorithms, TikTok can quickly drive minors – among the biggest users of
16 the app – into endless spools of content about sex and drugs.”³⁸⁶

17 310. The bots in this investigation were registered as users aged 13 to 15 and, as before,
18 programmed to demonstrate interest by how long they watched the videos TikTok’s algorithms
19
20

21 ³⁸⁰ *Id.*

22 ³⁸¹ *Id.*

23 ³⁸² *Id.*

24 ³⁸³ *Id.*

25 ³⁸⁴ *Id.*

26 ³⁸⁵ *Id.*

27 ³⁸⁶ Rob Barry et al., *How TikTok Serves Up Sex and Drug Videos to Minors*, Wall St. J. (Sept. 8,
28 2021), https://www.wsj.com/articles/tiktok-algorithm-sex-drugs-minors-11631052944?st=e92pu5734lvc7ta&reflink=desktopwebshare_permalink.

1 served them.³⁸⁷ The bots scrolled through videos that did not match their interests without
 2 pausing.³⁸⁸ The bots lingered on videos that matched any of their programmed interests.³⁸⁹

3 311. Every second the bot hesitated or rewatched a video again proved key to what
 4 TikTok recommended to the accounts, which *The Wall Street Journal* found was used to “drive
 5 users of any age deep into rabbit holes of content.”³⁹⁰

6 312. For example, one bot was programmed to pause on videos referencing drugs,
 7 among other topics. The first day on the platform, the “account lingered on a video of a young
 8 woman walking through the woods with a caption suggesting she was in search of marijuana.”³⁹¹
 9 The following day, the bot viewed a video of a “marijuana-themed cake.”³⁹² The “majority of the
 10 next thousand videos” TikTok directed at the teenage account “tout[ed] drugs and drug use,
 11 including marijuana, psychedelics and prescription medication.”³⁹³

12 313. TikTok similarly zeroed in on and narrowed the videos it showed accounts whether
 13 the bot was programmed to express interest in drugs, sexual imagery, or a multitude of interests.
 14 In the first couple of days, TikTok showed the bots a “high proportion of popular videos.”³⁹⁴ “But
 15 after three days, TikTok began serving a high number of obscure videos.”³⁹⁵

16
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20 ³⁸⁷ *Id.*

21 ³⁸⁸ *Id.*

22 ³⁸⁹ *Id.*

23 ³⁹⁰ *Id.*

24 ³⁹¹ *Id.*

25 ³⁹² *Id.*

26 ³⁹³ *Id.*

27 ³⁹⁴ *Id.*

28 ³⁹⁵ *Id.*

1 314. For example, a bot registered as a 13 year old was shown a series of popular videos
2 upon signing up.³⁹⁶ The bot, which was programmed to demonstrate interest in sexual text and
3 imagery, also watched sexualized videos.

4 315. At least 2,800 of the sexualized videos that were shown to *The Wall Street Journal*'s
5 bots were labeled as being for adults only.³⁹⁷ However, TikTok directed these videos to the minor
6 accounts because, as TikTok told *The Wall Street Journal*, it does not “differentiate between videos
7 it serves to adults and minors.”³⁹⁸

8 316. TikTok also directed a concentrated stream of videos at accounts programmed to
9 express interest in a variety of topics. One such account was programmed to linger over hundreds
10 of Japanese film and television cartoons. “In one streak of 150 videos, all but four” of the videos
11 TikTok directed at the account “featured Japanese animation – many with sexual themes.”³⁹⁹

12 317. The relentless stream of content intended to keep users engaged “can be especially
13 problematic for young people” because they may lack the capability to stop watching, says David
14 Anderson, a clinical psychologist at the nonprofit mental health care provider, The Child Mind
15 Institute.⁴⁰⁰

16 318. In a similar investigation, *The Wall Street Journal* found TikTok “flood[ed] teen
17 users with videos of rapid-weight-loss competitions and ways to purge food that health
18 professionals say contribute to a wave of eating disorder cases spreading across the country.”⁴⁰¹
19
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21 ³⁹⁶ *Id.*

22 ³⁹⁷ *Id.*

23 ³⁹⁸ *Id.*

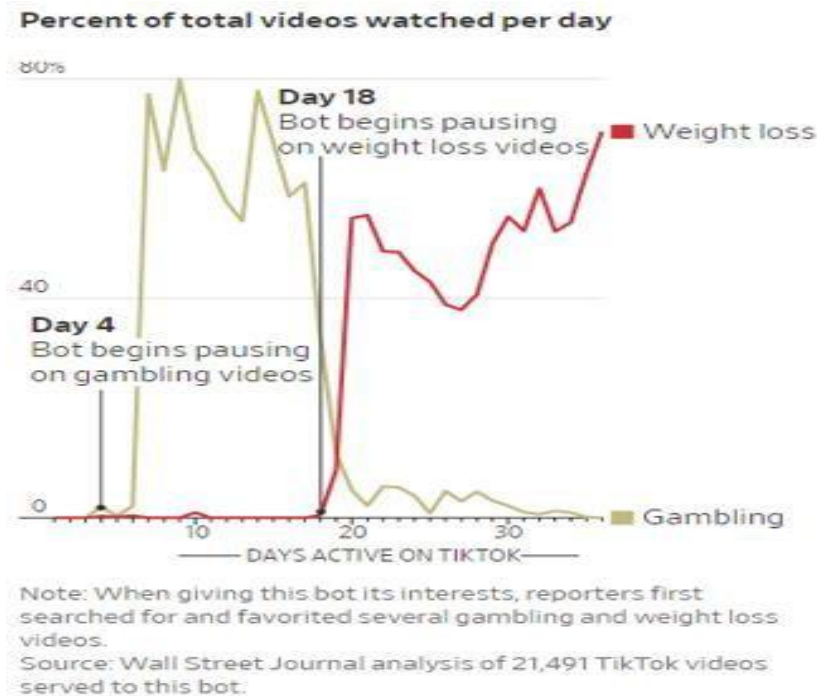
24 ³⁹⁹ *Id.*

25 ⁴⁰⁰ *Id.*

26 ⁴⁰¹ Tawnell D. Hobbs et al., *The Corpse Bride Diet: How TikTok Inundates Teens With Eating-*
27 *Disorder Videos*, Wall St. J. (Dec. 17, 2021), [https://www.wsj.com/articles/how-tiktok-inundates-](https://www.wsj.com/articles/how-tiktok-inundates-teens-with-eating-disorder-videos-11639754848)
28 [teens-with-eating-disorder-videos- 11639754848](https://www.wsj.com/articles/how-tiktok-inundates-teens-with-eating-disorder-videos-11639754848) (some of the accounts performed searches or
sent other, undisclosed signals indicating their preferences).

319. In this investigation, *The Wall Street Journal* analyzed the tens of thousands of videos TikTok recommended to a dozen bots registered as 13 year olds. As before, the bots were given interests. Bots scrolled quickly through videos that did not match their interests and lingered on videos that did.⁴⁰² The accounts registered as 13 year olds were programmed at different times to display interests in weight loss, gambling, and alcohol.⁴⁰³

320. “TikTok’s algorithm quickly g[ave] users the content they’ll watch, for as long as they’ll watch it.”⁴⁰⁴ For example, TikTok streamed gambling videos to a bot registered to a 13 year old after it first searched for and favorited several such videos.⁴⁰⁵ When the bot began demonstrating interest in weight loss videos, the algorithm adapted quickly, as the chart below demonstrates:⁴⁰⁶



⁴⁰² *Id.*

⁴⁰³ *Id.*

⁴⁰⁴ *Id.*

⁴⁰⁵ *Id.*

⁴⁰⁶ *Id.*

1 321. After the change in programming, weight loss videos accounted for well over 40%
2 of the content TikTok’s algorithm recommended to the user.⁴⁰⁷

3 322. The other accounts were also flooded with weight loss videos. Over the course of
4 about 45 days, TikTok inundated the accounts with more than 32,000 such videos, “many
5 promoting fasting, offering tips for quickly burning belly fat and pushing weight-loss detox
6 programs and participation in extreme weight-loss competitions.”⁴⁰⁸ Some encouraged purging,
7 eating less than 300 calories a day, consuming nothing but water some days, and other hazardous
8 diets.⁴⁰⁹

9 323. According to Alyssa Moukheiber, a treatment center dietitian, TikTok’s powerful
10 algorithm and the harmful streams of content it directs at young users can tip them into unhealthy
11 behaviors or trigger a relapse.⁴¹⁰

12 324. Unfortunately, it has done just that for several teenage girls interviewed by *The*
13 *Wall Street Journal*, who reported developing eating disorders or relapsing after being influenced
14 by the extreme diet videos TikTok promoted to them.⁴¹¹

15 325. They are not alone. Katie Bell, a co-founder of the Healthy Teen Project, “said the
16 majority of her 17 teenage residential patients told her TikTok played a role in their eating
17 disorders.”⁴¹²

18 326. Others, like Stephanie Zerwas, an associate professor of psychiatry at the
19 University of North Carolina at Chapel Hill, could not recount how many of her young patients
20 told her that: “I’ve started falling down this rabbit hole, or I got really into this or that influencer
21

22
23 ⁴⁰⁷ *Id.*

24 ⁴⁰⁸ *Id.*

25 ⁴⁰⁹ *Id.*

26 ⁴¹⁰ *Id.*

27 ⁴¹¹ *Id.*

28 ⁴¹² *Id.*

1 on TikTok, and then it started to feel like eating-disorder behavior was normal, that everybody was
2 doing that.”⁴¹³

3 327. This trend extends nationwide. The National Association of Anorexia Nervosa and
4 Associated Disorders has fielded 50% more calls to its hotline since the pandemic began, most of
5 whom it says are from young people or parents on their behalf.⁴¹⁴

6 328. Despite the ample evidence that TikTok’s design and operation of its platform
7 harms the tens of millions of youth who use it, TikTok continues to manipulate them into returning
8 to the platform again and again so that it may serve them ads in between the exploitative content
9 it amplifies.

10 329. TikTok and its parent company, ByteDance, know excessive use by youth can be
11 harmful. This is why, in 2018, ByteDance instituted a number of controls for youth use to its
12 Chinese domestic version of TikTok, Douyin, including the creation of a “teenager mode” that
13 limited use to 40 minutes per day between the hours of 6:00 a.m. and 10:00 p.m.⁴¹⁵ As of 2021,
14 “teenager mode” was made mandatory for users under the age of 14.⁴¹⁶ TikTok has made no such
15 restrictions for youth users in the United States.

16 **K. Defendants Worked Together to Falsely Promote the Safety of Their**
17 **Platforms for Youth in Order to Grow Their Collective Profits**

18 330. Defendants worked together to set up, develop, and fund a network to falsely
19 promote the benefits and safety of social media in order to mislead consumers and the public
20 through misrepresentations and omissions regarding the dangers of youth social media in order to
21 profit from their products.

22 331. This interconnected and interrelated network relied on by Defendants’ collective
23 use of Front Groups was developed and funded collectively by Defendants, which were intended

24 ⁴¹³ *Id.*

25 ⁴¹⁴ *Id.*

26 ⁴¹⁵ How China takes extreme measures to keep teens off Tiktok.

27 ⁴¹⁶ *Id.*

1 to mislead consumers and the American public regarding the dangers associated with youth social
2 media use.

3 332. Defendants' collective scheme to increase profits and revenues centered around the
4 development, dissemination, and reinforcement of several false propositions, *inter alia*, that:
5 (1) social media use is safe for youth; (2) social media is good for youth; (3) social media use is
6 non-addictive; (4) social media is not targeted to youth; and (5) Defendants have enacted proper
7 safeguards to protect youth online.

8 333. Defendants knew that none of these propositions was true and that there was no
9 evidence to support them.

10 334. Each Defendant worked individually and collectively to develop and actively
11 promulgate these false propositions in order to mislead consumers and the public regarding the
12 appropriate use, risks, and safety of youth social media use.

13 335. In conjunction with their efforts, Defendants joined forces to achieve their
14 collective goal: to persuade consumers and the American public that social media use is safe and
15 beneficial for children.

16 336. Defendants also worked together to stall efforts to enact protections for children.
17 In an August 2019 meeting with fellow tech giants, including Facebook, executives from Google
18 claimed to “‘have been successful in slowing down and delaying the [regulation] process and have
19 been *working behind the scenes hand in hand with the other companies*’” to “‘find areas of
20 alignment and narrow gaps in our positions and priorities on child privacy and safety,’” as stated
21 in an internal memorandum circulated before the meeting.⁴¹⁷ The memorandum continued:
22 “‘Whether at this meeting or at another forum, *we may want to reinforce that this is an area of*
23 *particular importance to have a coordinated approach*,’” Google said about children’s safety.⁴¹⁸

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25
26 ⁴¹⁷ Leah Nysten, *Google sought fellow tech giants’ help in stalling kids’ privacy protections, states*
27 *allege* (Oct. 22, 2021), <https://www.politico.com/news/2021/10/22/google-kids-privacy-protections-tech-giants-516834>.

28 ⁴¹⁸ *Id.*

1 **1. Defendants Disseminated False and Misleading Messages**
2 **About Social Media Use**

3 337. Defendants made the following false and misleading representations to Congress
4 and/or the American public:

5 338. During a public chat with Orrin Hatch at Brigham Young University on March 25,
6 2011, which was later published on YouTube, Mark Zuckerberg, CEO of Facebook stated: “One
7 of the things that got people initially very comfortable with having a page on a service like
8 Facebook is that we offer these extremely robust privacy controls We are really focused on
9 safety, especially children’s safety. We take a lot of extra precautions to make sure it is a safe
10 environment for them to use the service. We really try to build a safe environment.”⁴¹⁹

11 339. At the same chat at Brigham Young University, Zuckerberg went on to say: “Right,
12 and [children], they feel like Facebook is this really secure place and that it’s a hundred percent
13 safe, and um, we’re always thinking about little and big things like that that we can do to keep it
14 safe for, for the people who use our service.”⁴²⁰

15 340. When testifying before members of the U.S. Senate Committee on Commerce,
16 Science, and Transportation on April 10, 2018, Zuckerberg was asked whether he worries about
17 social media addiction as a problem for America’s teens and answered:

18 At Facebook, specifically, I view our responsibility as not just building services
19 that people like, but building services that are good for people and good for society
20 as well. So we study a lot of effects of well-being of our – of our tools and broader
21 technology. . . .

22 What we find in general is that if you’re using social media in order to build
23 relationships . . . you’re sharing content with friends, you’re interacting, then that
24 is associated with all of the long-term measures of well-being that you’d intuitively
25 think of⁴²¹

26 ⁴¹⁹ Todd Hollingshead, *Facebook’s Zuckerberg at BYU: Be passionate about what you’re doing*,
27 BYU University Connections News (Mar. 24, 2011), <https://news.byu.edu/news/facebook-zuckerberg-byu-be-passionate-about-what-youre-doing>.

28 ⁴²⁰ *Id.*

⁴²¹ Transcript of Joint Hearing before the Committee on Commerce, Science, and Transportation
United States Senate and the Committee on the Judiciary United States Senate, 115 Cong. at 111,
Facebook, Social Media Privacy, and the Use and Abuse of Data (Apr. 10, 2018),
<https://www.youtube.com/watch?v=AB4mB-K7-xY>.

1 341. At the same Congressional session, Zuckerberg was asked whether his companies
 2 “[h]ire consulting firms to help them figure out how to get more dopamine feedback loops so that
 3 people don’t want to leave the platform.” He answered: “No . . . that’s not how we talk about this
 4 or how we set up our product teams. We want our products to be valuable to people, and if they’re
 5 valuable, then people choose to use them.”⁴²²

6 342. At the same Congressional session, when asked about protecting children,
 7 Zuckerberg said: “I think protecting minors and protecting their privacy is extremely important
 8 and we do a number of things on Facebook to do that already.”⁴²³

9 343. On July 12, 2018, during a published interview with Kara Swisher, Zuckerberg
 10 discussed Facebook’s core principles, stating: “There are really two core principles at play here.
 11 There’s giving people a voice, so that people can express their opinions. Then, there’s keeping
 12 the community safe, which I think is really important.”⁴²⁴

13 344. On August 21, 2018, in a public post published on his Facebook page, Zuckerberg
 14 stated: “One of the most important responsibilities we have as a company is to keep people safe
 15 and stop anyone from abusing our service.”⁴²⁵

16 345. On December 23, 2020, the U.S. Senate Committee on the Judiciary posed
 17 questions to Facebook, including whether it could “determine whether increased use of its platform
 18 among teenage girls has any correlation with increased signs of depression [or anxiety]”
 19 Facebook answered: “no.” In response to another question regarding what research Meta had

20 _____
 21 ⁴²² Transcript of Joint Hearing before the Committee on Commerce, Science, and Transportation
 22 United States Senate and the Committee on the Judiciary United States Senate, 115 Cong., at 111,
Facebook, Social Media Privacy, and the Use and Abuse of Data (Apr. 10, 2018),
<https://www.youtube.com/watch?v=AB4mB-K7-xY>.

23 ⁴²³ Transcript of Joint Hearing before the Committee on Commerce, Science, and Transportation
 24 U.S. Senate and the Committee on the Judiciary U.S. Senate, 115 Cong. *Facebook Social Media*
 25 *Privacy, and the Use and Abuse of Data*, at 113 (Apr. 10, 2018); <https://www.youtube.com/watch?v=AB4mB-K7-xY>.

26 ⁴²⁴ Kara Swisher, *Zuckerberg: The Record Interview*, Vox (July 12, 2018) <https://www.vox.com/2018/7/18/17575156/mark-zuckerberg-interview-facebook-recode-kara-swisher>.

27 ⁴²⁵ Mark Zuckerberg, Facebook (Aug. 21, 2018), https://www.facebook.com/zuck/posts/10105188590724391?__tn__=K-R.
 28

1 conducted internally on the mental health impacts of social media use, Facebook responded: “The
2 effects of social media are still being studied”⁴²⁶

3 346. Zuckerberg testified before a Congressional committee again on March 25, 2021,
4 speaking to members of the U.S. House of Representatives Committee on Energy and Commerce.
5 A committee member asked: “Do you believe that your platform harms children?” Zuckerberg
6 answered:

7 I don’t believe so. This is something that we study and we care a lot about;
8 designing products that improve peoples’ well-being is very important to us. And
9 what our products do is help people stay connected to people they care about, which
I think is one of the most fundamental and important human things that we do,
whether that’s for teens or for people who are older than that.⁴²⁷

10 347. Other Defendants have also disseminated false and misleading messages publicly
11 regarding the harms and benefits of their social media platforms. For instance, on October 26,
12 2021, Michael Beckerman, TikTok’s Vice President and Head of Public Policy, Americas, testified
13 before the U.S. Senate Committee on Science, Commerce, and Transportation and stated: “Our
14 mission is to inspire creativity and bring joy, and that mission is the foundation for our privacy
15 and safety policies that aim to protect and promote the well-being of minors on the app.”⁴²⁸

16 348. At the same hearing, Beckerman went on to say: “We have proactively
17 implemented privacy and safety protections to promote the well-being of children and teenagers,
18 and we continue to work on changes to support age-appropriate experiences on our platform.”⁴²⁹

19
20 ⁴²⁶ Facebook, Inc. Responses to Questions for the Record from the Committee on the Judiciary
21 November 17, 2020 Hearing: Breaking the News: Censorship, Suppression, and the 2020 Election,
at 124-25 (Dec. 23, 2020), [https://www.judiciary.senate.gov/imo/media/doc/Zuckerberg
%20Responses%20to%20QFRs.pdf](https://www.judiciary.senate.gov/imo/media/doc/Zuckerberg%20Responses%20to%20QFRs.pdf).

22 ⁴²⁷ Disinformation Nation: Social Media’s Role in Promoting Extremism and Misinformation,
23 Hearing Before House Energy and Commerce Subcommittee on Communications and Technology
(Mar. 25, 2021), [https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-
IF16-Transcript-20210325.pdf](https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf).

24
25 ⁴²⁸ *Statement of Michael Beckerman, Vice President and Head of Public Policy*, Protecting Kids
26 Online: Snapchat, TikTok, and YouTube: Hearing Before the Subcommittee on Consumer
27 Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021),
[https://www.commerce.senate.gov/services/files/8C751FF4-A1FD-4FCA-80F6-C84BEB04
C2F9](https://www.commerce.senate.gov/services/files/8C751FF4-A1FD-4FCA-80F6-C84BEB04C2F9).

28 ⁴²⁹ *Statement of Michael Beckerman, Vice President and Head of Public Policy*, Protecting Kids
Online: Snapchat, TikTok, and YouTube: Hearing Before the Subcommittee on Consumer
CPLT FOR VIOLATIONS OF: (1) CAL PUB NUISANCE LAW; (2) CAL UNFAIR COMPETITION
LAW; (3) RICO ACT; & (4) NEGLIGENCE & GROSS NEGLIGENCE -

1 349. Also on October 26, 2021, Leslie Miller, YouTube’s Vice President, Government
 2 Affairs & Public Policy, testified before the U.S. Senate Committee on Science, Commerce, and
 3 Transportation, stating: “Ensuring the safety of children is not only the right thing to do, it also
 4 helps us to earn the trust of parents, who see that we are building a safe environment for kids and
 5 families.”⁴³⁰

6 350. Miller went on to say: “[Users] are introduced to a diversity of content that isn’t
 7 based on a particular network that they are a part of. In so doing, there may be additional videos
 8 that are recommended to them based on some signals. But those signals will be overridden if – to
 9 make sure we are not recommending harmful content.”⁴³¹

10 351. During the same hearing, when asked what steps YouTube takes to eliminate
 11 hurtful body image content from its platform, Miller stated: “We prohibit content that promotes or
 12 glorifies things such as eating disorders.”⁴³²

13 352. In further comments before the committee, Miller asserted: “We have made
 14 significant investments over the past few years in policies, technology, and teams that help provide
 15 kids and families with the best protections possible.”⁴³³

16
 17 _____
 18 Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021),
<https://www.commerce.senate.gov/services/files/8C751FF4-A1FD-4FCA-80F6-C84BEB04C2F9>.

19 ⁴³⁰ *Statement of Leslie Miller, Vice President, YouTube Government Affairs & Public Policy,*
 20 *Protecting Kids Online: Snapchat, TikTok, and YouTube: Hearing Before the Subcommittee on*
 21 *Consumer Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021),*
<https://www.commerce.senate.gov/services/files/2F8F8DE5-9C3F-4974-87EE-01CB2D262EEA>.

22 ⁴³¹ *Senate Commerce, Science and Transportation Subcommittee on Consumer Protection,*
 23 *Product Safety and Data Security Holds Hearing on Social Media’s Impact on Children, CQ*
 24 *Transcriptions*, at 20 (Oct. 26, 2021), <https://www.commerce.senate.gov/2021/10/protecting-kids-online-snapchat-tiktok-and-youtube>.

25 ⁴³² *Id.* at 22.

26 ⁴³³ *Statement of Leslie Miller, Vice President, YouTube Government Affairs & Public Policy,*
 27 *Protecting Kids Online: Snapchat, TikTok, and YouTube: Hearing Before the Subcommittee on*
 28 *Consumer Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021),*
<https://www.commerce.senate.gov/services/files/2F8F8DE5-9C3F-4974-87EE-01CB2D262EEA>.

1 353. A representative for Snap, Inc. also testified before the U.S. Senate Committee on
 2 Science, Commerce, and Transportation on October 26, 2021. When asked what steps Snap takes
 3 to eliminate hurtful body image content from its platform, Jennifer Stout, Vice President of Global
 4 Public Policy, stated: “[W]e don’t allow unvetted, unmoderated content from being surfaced up to
 5 our users.”⁴³⁴

6 354. In response to Senator Lee’s comments during the hearing that content on Snapchat
 7 is not appropriate for minor youth, Stout replied: “While I would agree with you, tastes vary when
 8 it comes to the kind of content that is promoted on Discover, there is no content there that is illegal.
 9 There is no content there that is hurtful.”⁴³⁵

10 355. Stout went on to say: “[O]n a platform like SnapChat, there is no broadcast
 11 disinformation or hate speech, and that’s why I think SnapChat is, in fact, a very appealing place
 12 for advertisers because they know their advertisements will be placed next to safe content.”⁴³⁶

13 356. When asked by Senator Blumenthal whether Snap had conducted any research that
 14 showed social media can have a negative effect on children’s mental health and whether its app
 15 promotes addiction-like use, Stout answered: “[S]ome of the research that we did showed that 95%
 16 of users say that Snapchat makes them happy.”

17 357. Stout asserted: “We make no effort – and have no plans – to market to children, and
 18 individuals under the age of 13 are not permitted to create Snapchat accounts”⁴³⁷ but also that “the
 19 content that appears on SnapChat is appropriate for an age group of 13 and above.”⁴³⁸

20
 21
 22 ⁴³⁴ *Id.* at 21.

23 ⁴³⁵ *Id.* at 26.

24 ⁴³⁶ *Id.* at 24.

25 ⁴³⁷ *Statement of Jennifer Stout, Vice President of Global Public Policy, Snap Inc., Protecting Kids*
 26 *Online: Snapchat, Tiktok, and YouTube: Hearing Before the Subcommittee on Consumer*
 27 *Protection, Product Safety, and Data Security, 117 Cong. (Oct. 26, 2021),*
https://assets.ctfassets.net/gqgsr8avay9x/1cR28yqyK12gRYp4DvAdFK/05056b6b21d5ed8be4d71e19299dec99/Testimony_of_Jennifer_Stout_VP_of_Global_Public_Policy__Snap_Inc.pdf.

28 ⁴³⁸ *Id.* at 25.

1 358. These statements were patently false and misleading when made in light of
 2 Defendants' intentional targeting of youth users; use of algorithms that deluge users with endless
 3 feeds of extreme content; and operation of platforms to promote widespread, excessive, and
 4 addictive use known to be harmful to youth.

5 **2. Defendants Utilized Industry Groups to Disseminate Their**
 6 **False and Misleading Messages**

7 359. Defendants utilized industry groups to carry out their scheme of targeting and
 8 addicting youth by disseminating deceptive information about the safety of social media for youth.

9 360. Advocacy groups and professional associations became vehicles to reach
 10 policymakers and the public. Defendants exerted influence and effective control over the
 11 messaging by these groups by providing major funding directly to them. Defendants funded these
 12 "Front Groups" in order to ensure supportive messages from these seemingly neutral and credible
 13 third parties, and their funding did, in fact, ensure such supportive messages – often at the expense
 14 of their own constituencies.

15 361. Defendants funded Front Groups in order to ensure supportive messages from these
 16 seemingly neutral and credible third parties; and their funding did, in fact, ensure such supportive
 17 messages. They have used these Front Groups to commission, edit, and arrange for favorable
 18 messaging with misrepresentations about the benefits of their platforms for youth.

19 362. On information and belief, Defendants took an active role in guiding, reviewing,
 20 and approving many of the false statements made by the Front Groups. By funding, directing,
 21 editing, approving, and distributing these messages, Defendants exercised control over and
 22 adopted their false and deceptive messages and acted in concert with the Front Groups and through
 23 the Front Groups to deceptively promote the idea that social media is healthy and beneficial for
 24 youth.

25 **a. NetChoice**

26 363. NetChoice is an industry-backed professional association front group with
 27 systematic connections and interpersonal relationships with Defendants. As a member-based
 28 organization, the overwhelming majority of its funding comes from the dues of its members,

1 including Google, Meta, and TikTok.⁴³⁹ Google has listed NetChoice as one of the organizations
 2 “that receive the most substantial contributions from Google’s U.S. Government Affairs and
 3 Public Policy team.”⁴⁴⁰

4 364. NetChoice engages in lobbying and other activities to protect Defendants’ interests
 5 and ability to continue targeting youth with its harmful social media platforms. It is considered
 6 “one of the tech industry’s most aggressive lobbying forces in Washington.”⁴⁴¹ From 2020 through
 7 2022, it has spent over \$4.9 million in federal lobbying expenses.⁴⁴²

8 365. NetChoice has gone to great lengths to protect its members, including Defendants,
 9 from accountability for their actions that target and harm children. In December 2022, NetChoice
 10 filed suit against the California Attorney General challenging the passage of the California Age-
 11 Appropriate Design Code Act (AB 2273) in order to ensure Defendants’ freedom to target children
 12 with detrimental material.⁴⁴³ In its suit, NetChoice specifically defends algorithms such as those
 13 employed by Defendants, referred to in AB 2273 as “dark patterns,” which “lead or encourage
 14
 15

16 ⁴³⁹ *NetChoice: About Us*, <https://netchoice.org/about/>; NetChoice 2019 IRS 990 form; Christiano
 17 Lima, Inside the power struggle over the high-stakes hearing with top tech CEOs, Politico (July 20,
 2020), [https://www.politico.com/news/2020/07/20/apple-google-amazon-facebook-congress-](https://www.politico.com/news/2020/07/20/apple-google-amazon-facebook-congress-hearing-373218)
[hearing-373218](https://www.politico.com/news/2020/07/20/apple-google-amazon-facebook-congress-hearing-373218).

18 ⁴⁴⁰ *Trade Association and Membership Organizations*, Google (2022), [https://kstatic.](https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5b1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4)
 19 [googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7](https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5b1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4)
[a5b1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4](https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5b1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4).

20 ⁴⁴¹ Christiano Lima, Inside the power struggle over the high-stakes hearing with top tech CEOs,
 21 Politico (July 20, 2020), [https://www.politico.com/news/2020/07/20/apple-google-amazon-](https://www.politico.com/news/2020/07/20/apple-google-amazon-facebook-congress-hearing-373218)
[facebook-congress-hearing-373218](https://www.politico.com/news/2020/07/20/apple-google-amazon-facebook-congress-hearing-373218).

22 ⁴⁴² United States Senate Lobbying Disclosure, NetChoice, [https://lda.senate.gov/filings/public/](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
 23 [filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&cli](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
 24 [ent_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lob](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
 25 [byist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_dat](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
 26 [e_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&r](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
 27 [eport_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_ho](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
[use_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
[_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_e](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
[ntity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle)
[h#js_searchFormTitle](https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=netChoice&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search_h#js_searchFormTitle).

28 ⁴⁴³ Complaint, NetChoice, LLC d/b/a NetChoice v. Bona, 5:22-cv-08861 (N.D. Cal. 2022).

1 children to,” among other things, “take any action that the business knows, or has reason to know,
2 is materially detrimental to the child’s physical health, mental health, or well-being.”⁴⁴⁴

3 366. NetChoice has also used its standing as a seemingly neutral professional
4 organization to lobby state legislatures opposing legislation such as AB 2273 and similar statutes
5 in other states.⁴⁴⁵

6 367. NetChoice speaks out publicly in favor of Defendants and pushes
7 misrepresentations about the value of Defendants’ social media platforms for children and their
8 efforts. For instance, NetChoice has taken the position that social media ought to be expanded for
9 youth under 13 and that Facebook specifically can be trusted with providing adequate protection
10 to young children using the platform. “[S]ocial networks can deliver value to pre-teens while also
11 controlling elements of the experience that require parental supervisions.”⁴⁴⁶

12 368. It has taken the position that any limitations on the types of algorithms utilized by
13 Defendants to target youth would be “potentially harmful to young people” and “have a negative
14 impact on children and teenagers’ ability to use . . . technology . . . in beneficial ways.”⁴⁴⁷

15 **b. Computer and Communications Industry Association**
16 **(“CCIA”)**

17 369. The Computer and Communications Industry Association (“CCIA”) is another
18 Front Group with systematic connections and interpersonal relationships with Defendants. CCIA
19 is a nonprofit trade association with Google and Meta as participating members.
20

21 ⁴⁴⁴ *Id.*; Cal. Civ. Code §1798.140(1).

22 ⁴⁴⁵ *See, e.g., Letter from Carl Szabo to Maryland General Assembly* (March 7, 2023),
23 [https://netchoice.org/netchoice-opposition-to-maryland-sb-844-blocking-teens-from-the-](https://netchoice.org/netchoice-opposition-to-maryland-sb-844-blocking-teens-from-the-internet/)
24 [internet/](https://netchoice.org/netchoice-opposition-to-maryland-sb-844-blocking-teens-from-the-internet/); *Letter from Zachary Lilly to Tennessee General Assembly Senate Commerce and Labor*
Committee (March 20, 2023), [https://netchoice.org/netchoice-testimony-against-tennessee-sb-](https://netchoice.org/netchoice-testimony-against-tennessee-sb-0138-for-first-amendment-parental-rights/)
[0138-for-first-amendment-parental-rights/](https://netchoice.org/netchoice-testimony-against-tennessee-sb-0138-for-first-amendment-parental-rights/).

25 ⁴⁴⁶ *Adding a Shallow End to the Social Network Swimming Pool*, NetChoice (June 5, 2012),
26 <https://netchoice.org/adding-a-shallow-end-to-the-social-network-swimming-pool/>.

27 ⁴⁴⁷ *Letter from Jennifer Huddleston to California Senate Appropriations Committee* (Aug. 2,
28 2022), [https://netchoice.org/wp-content/uploads/2022/08/NetChoice-Opposition-to-CA-AB-](https://netchoice.org/wp-content/uploads/2022/08/NetChoice-Opposition-to-CA-AB-2408-Jennifer-Huddleston.pdf)
[2408-Jennifer-Huddleston.pdf](https://netchoice.org/wp-content/uploads/2022/08/NetChoice-Opposition-to-CA-AB-2408-Jennifer-Huddleston.pdf).

370. Google is a controlling member of CCIA. Mark Isakowitz, Google's Vice President of Government Affairs and Public Policy (US and Canada), is a board member at CCIA. The Board members of CCIA presumably oversee the policy agenda for the organization and control the issues for which CCIA advocates. CCIA is also listed by Google as one of the organizations "that receive the most substantial contributions from Google's U.S. Government Affairs and Public Policy Team."⁴⁴⁸

371. CCIA has lobbied the federal government on behalf of Defendants and their ability to create algorithms that maximize engagement from young users. From 1998 through 2021, CCIA has spent over \$8.7 million in federal lobbying expenditures, including to protect Defendants' ability to continue targeting and addicting youth through their platforms.⁴⁴⁹ In January 2023, CCIA submitted formal comments to the Federal Trade Commission opposing a Petition for Rulemaking to initiate rulemaking to create protections for children on the internet and regulate online design features that target youth and seek to maximize young users' engagement with online platforms such as Defendants'.⁴⁵⁰ In its opposition, CCIA argued, among other things, that Defendants' algorithms designed to encourage bottomless scrolling are beneficial because they drive user engagement, which is "a desirable goal for users and creators" and "has led to

⁴⁴⁸ Trade Association and Membership Organizations, Google (2022), <https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5ba1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4>.

⁴⁴⁹ United States Senate Lobbying Disclosure, Registrations & Quarterly Activity, https://lda.senate.gov/filings/public/filing/search/?registrant=®istrant_country=®istrant_ppb_country=&client=Computer+%26+Communications&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_issue_area_description=&affiliated_organization=&affiliate_d_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search.

⁴⁵⁰ *Comments of the Computer & Communications Industry Association (CCIA), In re Petition of the Center for Digital Democracy, Fairplay, et al. for Rulemaking to Prohibit the Use on Children of Design Features that Maximize for Engagement*, Docket No. FTC-2022-0073.

1 innovations that benefit consumers.”⁴⁵¹ However, CCIA’s true motive in filing the opposition is
 2 barely concealed: one of the benefits described includes “boosting ad revenue” for developers such
 3 as Defendants.

4 372. Through its public statements and lobbying, CCIA promotes falsehoods about
 5 Defendants’ efforts to protect children on their platforms in order to dissuade lawmakers from
 6 regulating social media platforms’ unfettered access to youth. For instance, in a letter to a South
 7 Carolina joint legislative committee, CCIA asserted that “there are a number of efforts among our
 8 members to incorporate protective design features into their websites and platforms.”⁴⁵²

9 373. In other public statements, CCIA acknowledges that Defendants are working
 10 together while spreading falsehoods about their efforts to protect children. “Currently, digital
 11 service providers are working collaboratively to advance online safety by developing products and
 12 tools to further the goal of child safety, including incorporating protective design features into their
 13 websites and platforms,” CCIA asserted in a March 2023 press release available on its website.⁴⁵³
 14 CCIA’s State Policy Director has directly promoted these falsehoods, stating: “Protecting children
 15 and prioritizing online safety is a top concern for digital service providers.”⁴⁵⁴

16 374. CCIA and NetChoice have worked together, along with and on behalf of
 17 Defendants, to resist legislation that purports to regulate social media networks in ways that could
 18 offer more protections to youth users.⁴⁵⁵

21 ⁴⁵¹ Opposition at 5.

22 ⁴⁵² *Letter from Khara Boender to Joint Citizens and Legislative Committee on Children RE: SB*
 23 *591 – Children’s Default to Safety Act (Oppose)* (Mar. 28, 2023), [https://ccianet.org/wp-](https://ccianet.org/wp-content/uploads/2023/03/2023-3-24_CCIA-Comments-on-SC-SB-591.pdf)
[content/uploads/2023/03/2023-3-24_CCIA-Comments-on-SC-SB-591.pdf](https://ccianet.org/wp-content/uploads/2023/03/2023-3-24_CCIA-Comments-on-SC-SB-591.pdf).

24 ⁴⁵³ *CCIA Calls for Balance Regarding Age-Appropriate Design Code Legislation Being Proposed*
 25 *in Several States*, Computer & Communications Industry Association (Mar. 1, 2023),
[https://ccianet.org/news/2023/03/ccia-calls-for-balance-regarding-age-appropriate-design-code-](https://ccianet.org/news/2023/03/ccia-calls-for-balance-regarding-age-appropriate-design-code-legislation-being-proposed-in-several-states/)
[legislation-being-proposed-in-several-states/](https://ccianet.org/news/2023/03/ccia-calls-for-balance-regarding-age-appropriate-design-code-legislation-being-proposed-in-several-states/).

26 ⁴⁵⁴ *Id.*

27 ⁴⁵⁵ *See, e.g.,* Complaint, *NetChoice v. Paxton*, 1:21-cv-00840 (W.D. Tex. Sept. 22, 2021);
 28 Complaint, *NetChoice & CCIA v. Moody*, 4:21-cv-00220-RH-MAF (N.D. Fla. May 27, 2021).

c. Information Technology Industry Council (“ITI”)

375. The Information Technology Industry Council (“ITI”) is another Front Group with systematic connections and interpersonal relationships with Defendants. ITI is a trade association and lobbyist with Google, Meta, and Snap as participating and funding members. ITI is listed by Google as one of the organizations “that receive[s] the most substantial contributions from Google’s U.S. Government Affairs and Public Policy Team.”⁴⁵⁶

376. Adam Kovacevich, who led Google’s U.S. policy strategy and external affairs team for 12 years, has served as a board member for ITI.

d. TechNet

377. TechNet is another Front Group with systematic connections and interpersonal relationships with Defendants. TechNet is a trade association with Google, Meta, and Snap as funding members. In 2020, TechNet brought in over \$4.2 million in membership dues.⁴⁵⁷

378. Kent Walker, President of Global Affairs and Chief Legal Officer at Google, serves on the Executive Council of TechNet, which controls TechNet’s policy positions and direction.⁴⁵⁸

379. TechNet has a strong lobbyist presence on Capitol Hill and has been called “[Silicon] Valley’s strongest fundraising network and lobbying voice in Washington.”⁴⁵⁹

380. TechNet, along with NetChoice, CCIA, and ITI, advocates for tech companies such as Defendants to be subject to as little regulation governing their actions as possible. In their *amicus* brief supporting Google before the Supreme Court, these Front Groups asserted the benefits of YouTube’s algorithms, which serve to provide endless and increasingly salacious

⁴⁵⁶ Trade Association and Membership Organizations, Google (2022), <https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5bala719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4>.

⁴⁵⁷ Brian Schwarz, Silicon Valley Bank ex-CEO backed Big Tech lobbying groups that targeted Dodd-Frank, sought corporate tax cuts, Mar. 26, 2023, <https://www.cnn.com/2023/03/16/silicon-valley-bank-ex-ceo-greg-becker-backed-big-tech-lobbying-groups.html>.

⁴⁵⁸ <https://www.technet.org/executive-council/kent-walker/>.

⁴⁵⁹ *Meet the 20 Tech Insiders Defining the 2016 Campaign*, Wired (Jan. 19, 2016), <https://www.wired.com/2016/01/silicon-valley-influence-2016-election/>.

1 content to youth the longer they watch.⁴⁶⁰ According to the *amicus* brief, algorithms improve
 2 efficiency, “unlock[] the value of digital services” for users and creators, and provide a “seamless,
 3 satisfying user experience.”⁴⁶¹ The brief misleadingly asserts that the algorithms abide by content
 4 moderation policies that “generally prohibit, among other things, violent or dangerous content,
 5 spam, bullying, harassment, and sensitive or graphic content, which may include content about
 6 self-harm or harm to children.”⁴⁶²

7 **e. Chamber of Progress**

8 381. Chamber of Progress is another Front Group with systematic connections and
 9 interpersonal relationships with Defendants. Google and Meta are both funding members of the
 10 organization. Chamber of Progress is listed by Google as one of the organizations “that receive[s]
 11 the most substantial contributions from Google’s U.S. Government Affairs and Public Policy
 12 Team.”⁴⁶³

13 382. Chamber of Progress is a technology industry coalition focused on public policy
 14 advocacy. On issues impacting social media companies, it has exclusively aligned itself with
 15 social media companies and has filed *amicus* briefs in support of Meta. It has publicly advocated
 16 against states that have attempted to regulate social media use for youth, asserting: “[s]tudies have
 17 shown that social media can be a positive factor in children’s lives.”⁴⁶⁴

21 _____
 22 ⁴⁶⁰ CCIA et al., *Amicus Brief, Gonzales v. Google*, Supreme Court, No. 21-1333 (Jan. 19, 2023).

23 ⁴⁶¹ *Id.* at 13-15.

24 ⁴⁶² *Id.* at 17-18.

25 ⁴⁶³ Trade Association and Membership Organizations, Google (2022), <https://kstatic.googleusercontent.com/files/ddfc97f01d89290e37bc52abdd9704bc3314ec5598bebe9676c64cd7a5ba1a719acaf069c1f9c218986e507f58bf3b50c750119c778cb4e88e99f3fb4dd904b4>.

27 ⁴⁶⁴ *See, e.g.*, Chamber of Progress, Utah Bills Require Parental Control of Teen Social Media
 28 (Mar. 23, 2023), <https://progresschamber.org/utah-bills-require-parental-control-of-teen-social-media/>.

1 383. Adam Kovacevich, who previously led Google’s U.S. policy strategy and external
 2 affairs team, is the founder and CEO of Chamber of Progress. He has been quite outspoken against
 3 regulation aimed at safeguarding children online.⁴⁶⁵

4 384. This messaging by Defendants through their Front Groups was patently false and
 5 misleading when made in light of Defendants’ intentional targeting of youth users; use of
 6 algorithms that deluge users with endless feeds of extreme content; and operation of platforms to
 7 promote widespread, excessive, and addictive use known to be harmful to youth.

8 **V. THE COMMUNICATIONS DECENCY ACT EXPRESSLY ALLOWS**
 9 **INTERACTIVE COMPUTER SERVICE COMPANIES TO LIMIT**
 10 **HARMFUL CONTENT AND PROVIDES NO BLANKET IMMUNITY**
 11 **FOR THE ALLEGED MISCONDUCT HERE**

12 385. The Communications Decency Act, 47 U.S.C. §230(c), was passed by Congress to
 13 address the harms associated with certain content and drafted to limit liability for “Good
 14 Samaritans” seeking to restrict such harmful content. It is entitled “*Protection for ‘Good*
 15 *Samaritan’ blocking and screening of offensive material*” and states in 230(c)(1) that: “[n]o
 16 *provider* or user of an interactive computer service *shall be treated as the publisher* or speaker of
 17 any information provided by another information content provider.” 47 U.S.C. §230(c) (emphasis
 18 added); *see* 47 U.S.C. §230(b)(4)-(5). Section 230(c)(2), entitled “Civil liability,” expressly states
 19 that providers or users may not be held liable for actions taken “*to restrict access* to or availability
 20 of material” or to provide others with the means to “restrict access” to material “that the provider
 21 or user considers to be *obscene, lewd, lascivious, filthy, excessively violent, harassing, or*
 22 *otherwise objectionable*, whether or not such material is constitutionally protected.” 47 U.S.C.
 23 §230(c)(2)(A). Thus, the Communications Decency Act protects “Good Samaritans” seeking to
 24 limit the deluge of harmful content; it is no shield for Defendants’ own deliberate acts in designing,
 25 marketing, and operating social media platforms in ways harmful to youth so as to maximize youth
 26 engagement and advertising dollars.

27 ⁴⁶⁵ *See, e.g.,* Adam Kovacevich, *Banning Kids From Social Media Isn’t the Answer*, DC Journal
 28 – InsideSources (Apr. 8, 2023), <https://dcjournal.com/banning-kids-from-social-media-isnt-the-answer/>.

1 386. Plaintiff expressly disavow any claims or allegations that attempt to hold
2 Defendants liable as the publisher or speaker of any information provided by third parties within
3 the plain meaning of the statute and as interpreted by applicable law.

4 387. The Communications Decency Act does not immunize Defendants' conduct from
5 liability because, among other considerations: (a) Defendants are liable for their own affirmative
6 conduct in recommending, promoting, and amplifying harmful content to youth in ways
7 deliberately designed to be addictive; (b) Defendants are liable for their own actions designing and
8 marketing their social media platforms in a way that causes harm; (c) Defendants are liable for the
9 content they create that causes harm; and (d) Defendants are liable for deliberately creating
10 experiences for youth they know or have reason to know is harmful, unlawful, and/or tortious.

11 388. Plaintiff's claims arise from Defendants' status as designers and marketers of
12 dangerous social media platforms that have injured the health, comfort, and repose of its youth
13 community. The nature of Defendants' platforms centers around Defendants' use of algorithms
14 and other design features that encourage users to spend the maximum amount of time on their
15 platforms.

16 389. Defendants are also liable for the content they create. In addition to content such
17 as, for example, Snapchat filters, which promote body dysmorphia, Defendants send emails and
18 notifications to youth including material they create, which often promotes and amplifies harmful
19 content.

20 390. Plaintiff's claims are predicated on Defendants' conduct which has resulted in
21 fueling the current youth mental health crisis so evident among Plaintiff's youth.

22 **VI. CAUSES OF ACTION**

23 **COUNT I**

24 **Violations of California Public Nuisance Law** 25 **(Against All Defendants)**

26 391. Plaintiff incorporates each preceding paragraph as though set forth fully herein.

27 392. Plaintiff brings this claim under California public nuisance law as to all Defendants.
28

1 393. A public nuisance is an unreasonable interference with a right common to the
2 general public. Defendants knowingly created, assisted, or maintained a public nuisance which
3 proximately caused injury to Plaintiff.

4 394. Under California law, “anything which is injurious to health . . . or is indecent or
5 offensive to the senses, or an obstruction to the free use of property, so as to interfere with the
6 comfortable enjoyment of life or property . . . is a nuisance.” Cal. Civ. Code §3479. “A public
7 nuisance is one which affects at the same time an entire community or neighborhood, or any
8 considerable number of persons, although the extent of the annoyance or damage inflicted upon
9 individuals may be unequal.” *Id.* at §3480.

10 395. Under California Code of Civil Procedure §731, a nuisance action may be brought
11 by “any person whose property is injuriously affected, or whose personal enjoyment is lessened
12 by a nuisance.” C.C.P. §731. Damages may be recovered in a public nuisance action brought by
13 a specially injured party.

14 396. Defendants have created a mental health crisis in Plaintiff’s public schools, injuring
15 the public health and safety in Plaintiff’s community and interfering with the operations, use, and
16 enjoyment of the property of Plaintiff’s public schools. This condition affected any considerable
17 and substantial number of persons in Plaintiff’s jurisdiction.

18 397. Employees and patrons, including students, of Plaintiff’s public schools have a
19 right to be free from conduct that endangers their health and safety. However, Defendants have
20 engaged in conduct that endangers or injures the health and safety of the employees and students
21 of Plaintiff’s public schools by designing, marketing, and operating their respective social media
22 platforms for use by students in Plaintiff’s public schools in a manner that substantially interferes
23 with the functions and operations of Plaintiff’s public schools and impacts the public health, safety,
24 and welfare of Plaintiff’s public schools.

25 398. Defendants have engaged in conduct, acts, and omissions which unreasonably and
26 injuriously interfere with the public health and safety of Plaintiff’s public schools and community.
27 This conduct created substantial and unreasonable annoyance, inconvenience, and injury to the
28 public, endangered or injured the health and safety of Plaintiff’s employees and students. This

1 conduct resulted from Defendants' continued operation, management, and promotion of their
2 respective platforms, which have been directed at Plaintiff's students in a manner that substantially
3 interferes with the functions and operations of Plaintiff's schools, students, employees, and the
4 communities Plaintiff serves.

5 399. Each Defendant has created or assisted in the creation of a condition that is injurious
6 to the health and safety of Plaintiff, and the schools and students under his governance, and
7 interferes with the comfortable enjoyment of life and property of Plaintiff's public schools.

8 400. The health and safety of the students and employees of Plaintiff's public schools,
9 including those who use, have used, or will use Defendants' platforms, as well as those affected
10 by others' use of their platforms, are matters of substantial public interest and of legitimate concern
11 to Plaintiff.

12 401. Defendants' nuisance-creating conduct was intentional and unreasonable and/or
13 violates statutes which establish specific legal requirements for the protection of others.
14 Defendants' conduct has affected and continues to affect a substantial number of people within
15 Plaintiff's public schools and is likely to continue causing significant harm.

16 402. Defendants had control over their conduct in Plaintiff's public schools and that
17 conduct had an adverse effect on the public right. Defendants have had sufficient control over,
18 and responsibility for, the public nuisance they have created. Defendants are in control of the
19 "instrumentality" of the nuisance, namely the operation of their social media platforms, at all
20 relevant times.

21 403. Defendants' ongoing conduct has directly caused a severe disruption of the public
22 health, order, and safety in Plaintiff's public schools. Defendants' conduct is ongoing and
23 continues to produce permanent and long-lasting damage.

24 404. Defendants' conduct has created an ongoing, significant, unlawful, and
25 unreasonable interference with rights common to the general public, including the public health,
26 welfare, safety, peace, comfort, and convenience of Plaintiff's public schools.⁴⁶⁶

27
28 ⁴⁶⁶ See Restatement (Second) of Torts §821B.

1 405. This harm to youth mental health and the corresponding impacts to the public
2 health, safety, and welfare of Plaintiff's public schools outweighs any social utility of Defendants'
3 wrongful conduct.

4 406. The rights, interests, and inconvenience to Plaintiff's public schools far outweigh
5 the rights, interests, and inconvenience to Defendants, who have profited tremendously from their
6 wrongful conduct.

7 407. But for Defendants' actions, Plaintiff's students would not use social media
8 platforms as frequently or as long as they do today, would not be deluged with exploitative and
9 harmful content to the same degree, and the public health crisis that currently exists as a result of
10 Defendants' conduct would have been averted.

11 408. Logic, common sense, justice, policy, and precedent indicate Defendants' unfair
12 and deceptive conduct has caused the damage and harm complained of herein. Defendants knew,
13 or reasonably should have known, that their design, promotion, and operation of their platforms
14 would cause students to use their platforms excessively, that their marketing was designed to
15 appeal to youth, and that their active efforts to increase youth use of their platforms were causing
16 harm to youth and to schools, including youth in Plaintiff's public schools.

17 409. Thus, the public nuisance caused by Defendants was reasonably foreseeable,
18 including the financial and economic losses incurred by Plaintiff's public schools. Defendants
19 know, and have known, that their intentional, unreasonable, negligent, and unlawful conduct will
20 cause, and has caused, youth to become addicted to their social media platforms, which has a
21 harmful effect on youth mental health.

22 410. Despite this knowledge, Defendants intentionally, negligently, unreasonably,
23 and/or unlawfully marketed their products to adolescents and children, fueling the youth mental
24 health crisis in Plaintiff's public schools.

25 411. Alternatively, Defendants' conduct was at the very least, a substantial factor in
26 bringing about the public nuisance even if a similar result would have occurred without it. By
27 designing, marketing, promoting, and operating their platforms in a manner intended to maximize
28 the time youth spend on their respective platforms, despite knowledge of the harms to youth from

1 their wrongful conduct, Defendants directly facilitated the widespread, excessive, and habitual use
 2 of their platforms and the public nuisance affecting Plaintiff's public schools. By seeking to
 3 capitalize on their success by refining their platforms to increase the time youth spend on their
 4 platforms, Defendants directly contributed to the public health crisis and the public nuisance
 5 affecting Plaintiff's public schools.

6 412. Defendants' conduct is of a continuing nature and/or has produced a permanent or
 7 long-lasting effect, and, as Defendants' know or have reason to know, have a significant effect
 8 upon the public right.

9 413. Defendants' intentional, negligent, and/or unreasonable nuisance-creating conduct,
 10 for which the gravity of the harm outweighs the utility of the conduct, includes:

11 (a) Designing, marketing, promoting, and/or operating their platforms in a
 12 manner intended to prioritize harmful content and maximize the time youth spend on their
 13 respective platforms, despite knowledge of the harms to youth from their wrongful conduct;

14 (b) Manipulating users to keep using or coming back to their platforms through
 15 the use of IVRs;

16 (c) Intentionally marketing their platforms to youth, directly facilitating the
 17 widespread, excessive, and habitual use of their platforms among youth; and

18 (d) Knowingly designing and modifying their platforms in ways that promote
 19 excessive and problematic use in ways known to be harmful to children.

20 414. Defendants owed the public legal duties, including a preexisting duty not to expose
 21 Plaintiff's public schools to an unreasonable risk of harm and a duty to exercise reasonable and
 22 ordinary care and skill in accordance with the applicable standards of conduct in designing and
 23 marketing a product to youth and adolescents.

24 415. Each Defendant breached its duty to exercise the appropriate degree of care
 25 commensurate with marketing and promoting their products to youth.

26 416. Defendants' conduct is especially injurious to Plaintiff's public schools because, as
 27 a direct and proximate cause of Defendants' conduct creating or assisting in the creation of a public
 28

1 nuisance, Plaintiff, and the schools and students under his governance, have sustained and will
2 continue to sustain substantial injuries.

3 417. Defendants' conduct described herein violated the following laws:

4 (a) the California Consumer Legal Remedies Act, Cal. Civ. Code §1750 *et seq.*
5 ("CLRA"), which prohibits "methods of competition and unfair or deceptive acts or practices
6 undertaken by any person in a transaction intended to result or which results in the sale or lease of
7 goods or services to any consumer";

8 (b) the California Unfair Competition Law, Cal. Bus. & Prof. Code §17200 *et*
9 *seq.* ("UCL"), which prohibits unlawful or unfair acts or practices, which constitute unfair
10 competition;

11 (c) the California False Advertising Law, Cal. Bus. & Prof. Code §17500 *et*
12 *seq.* ("FAL"), which prohibits the making or dissemination of information which is untrue or
13 misleading with the intent to induce reliance in connection the disposition of property or services;

14 (d) COPPA, 15 U.S.C. §§6501-06, which regulates the conditions under which
15 platforms like Defendants' can collect and use information related to children under the age of 13;
16 and

17 (e) RICO, 18 U.S.C. §1962(c)-(d), which makes it "unlawful for any person
18 employed by or associated with any enterprise engaged in, or the activities of which affect,
19 interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of
20 such enterprise's affairs through a pattern of racketeering activity." 18 U.S.C. §§1962(c).

21 418. Each Defendant is liable for creating the public nuisance because the intentional,
22 unreasonable, negligent, and/or unlawful conduct of each Defendant was a substantial factor in
23 producing the public nuisance and harm to Plaintiff.

24 419. The nuisance created by Defendants' conduct is abatable.

25 420. Plaintiff's school districts have incurred expenditures and have had to take steps to
26 mitigate the harm and disruption caused by Defendants' conduct, including the following:

1 (a) hire and contract additional personnel providing mental and behavioral
2 health services, including clinicians, counselors, wellness coordinators, social workers, and
3 medical professionals, to address mental, emotional, and social health issues;

4 (b) develop additional resources to address mental, emotional, and social health
5 issues, such as crisis response teams to address crises related to or stemming from social media
6 incidents, including cyberbullying and suicide risks;

7 (c) creation of a student wellness ambassador program;⁴⁶⁷

8 (d) increase trainings for teachers and staff to identify students exhibiting
9 symptoms affecting their mental, emotional, and social health, including a school-based suicide
10 risk assessment protocol for Marin County schools;⁴⁶⁸

11 (e) train teachers and staff on how to promote health social media use and
12 digital citizenship, including how to manage social media use interfering with classroom and
13 learning activities;

14 (f) train parents on how to provide guidance on social media use and healthy
15 digital citizenship for their children;

16 (g) hire additional personnel to respond to and manage efforts to combat harm
17 caused by Defendants' platforms, including cyberbullying, violence, and vandalism;

18 (h) develop awareness and informational campaigns to educate students about
19 the dangers of using Defendants' platforms and healthy social media use;

20 (i) creation of a Marin County Schools Wellness Collaborative that "meets on
21 a monthly basis to discuss best practices to enhance systems of support for adolescent health,

25 ⁴⁶⁷ *Student Wellness Ambassador Program*, Marin County Office of Education,
26 <https://sites.google.com/marinschools.org/screening/student-events-initiatives/student-wellness-ambassador-program>.

27 ⁴⁶⁸ *See, e.g., A School-Based Suicide Risk Assessment Protocol: Effective July 1, 2022*, Marin
28 County Office of Education, <https://www.marinschools.org/Page/268>.

1 mental health, substance use, and sexual health services within the school setting, including
 2 resources sharing and trainings”;⁴⁶⁹

3 (j) develop trainings, lesson plans, toolkits, books, posters, videos, and other
 4 materials to teach students about the dangers of using Defendants’ platforms and healthy social
 5 media use;

6 (k) update teacher, parent, and student handbooks to address use of and harm
 7 resulting from social media use during school sessions and when using school-issued technology,
 8 including appropriate use of Defendants’ platforms;

9 (l) update code of conduct for disciplinary infractions resulting from harm
 10 caused by Defendants’ platforms, including cyberbullying and threats made against students and
 11 teachers using Defendants’ platforms;

12 (m) repair property damaged as a result of the exploitative and harmful content
 13 Defendants directed at students;

14 (n) increase disciplinary services and time spent addressing cyberbullying,
 15 harassment, school disruption, and threats;

16 (o) confiscate devices on which students were compelled by Defendants’
 17 conduct to use while in class or on school campuses to access Defendants’ platforms;

18 (p) meet with students and the parents of students caught using Defendants’
 19 platforms at school;

20 (q) divert time and resources from instructional activities to address student
 21 behavioral issues and notify parents and guardians; and

22 (r) investigate and respond to threats made against schools and students over
 23 social media.

24 421. Fully abating the nuisance resulting from Defendants’ conduct will require much
 25 more than these steps.

27 ⁴⁶⁹ *The Marin Schools Wellness Collaborative*, Wellness: Marin Schools,
 28 <https://sites.google.com/marinschools.org/screening/wellness-collaborative>.

422. Plaintiff's public schools request an order providing for abatement of the public nuisance that Defendants have created, or of which Defendants have assisted in the creation, and enjoining Defendants from future violations.

423. Plaintiff also seeks the maximum statutory and civil penalties permitted by law, including actual and compensatory damages, as a result of the public nuisance that Defendants have created, or of which Defendants have assisted in the creation.

424. Defendants are jointly and severally liable because they have acted in concert with each other and because Plaintiff is not at fault.

COUNT II

**Violation of the California Unfair Competition Law,
Cal. Bus. & Prof. Code §17200, *et seq.*
(Against All Defendants)**

425. Plaintiff incorporates each preceding paragraph as though set forth fully herein.

426. Plaintiff brings claims against all Defendants under California’s Unfair Competition Law (“UCL”), which prohibits Defendants from engaging in “any unlawful [or] unfair . . . business act or practice.” Cal. Bus. & Prof. Code §17200.

427. Plaintiff's claim rests on Defendants' affirmative conduct, which has resulted in the current public health crisis among youth mental health.

428. Plaintiff and each Defendant are “person[s]” within the meaning of the UCL.

429. Defendants' conduct violated the UCL by:

(a) designing, marketing, promoting, and/or operating their platforms in a manner intended to maximize the time youth spend on their respective platforms, despite knowledge of the harms to youth from their wrongful conduct;

(b) manipulating users to keep using or coming back to their platforms through the use of IVRs;

(c) intentionally marketing their platforms to children and teens, directly facilitating the widespread, excessive, and habitual use of their platforms among youth; and

(d) knowingly designing and modifying their platforms in ways that promote excessive and problematic use in ways known to be harmful to children.

1 430. Each Defendant’s conduct alleged in this Complaint was and is “unlawful” under
 2 the UCL because Defendants’ conduct: (a) was and is unlawful under each of the laws, and for
 3 each of the reasons, set forth above in Plaintiff’s prior causes of action; (b) violates the CLRA,
 4 Cal. Civ. Code §1750 *et seq.*, because it constitutes “methods of competition and unfair or
 5 deceptive acts or practices undertaken by any person in a transaction intended to result or which
 6 results in the sale . . . of goods or services to any consumer,” including because Defendants’
 7 conduct violates the CLRA’s specific prohibitions on misrepresentations of goods and services set
 8 forth in Cal. Civ. Code §1770(a), including but not limited those set forth in §1770(a)(2), (3), (5),
 9 (7), and (17); (c) violates the FAL, Cal. Bus. & Prof. Code §17500 *et seq.*, because it constitutes
 10 the making or dissemination of information which is untrue or misleading with the intent to induce
 11 reliance in connection with the disposition of property or services; and (d) violates COPPA, 15
 12 U.S.C. §§6501-06, and regulations promulgated thereunder.

13 431. Each Defendant’s conduct alleged in this Complaint also was and is “unfair” under
 14 the UCL, including but not limited to each Defendant’s conduct of (a) designing its social media
 15 platforms to be manipulative and addictive, (b) intentionally targeting youth even though
 16 Defendants know that doing so causes youth to become addicted to social media and otherwise
 17 significantly harms youth mental health, (c) aggressively marketing their social media platforms
 18 to youth, (d) continuing to use and strengthen their algorithms even though Defendants know their
 19 algorithms are manipulative and have myriad serious negative effects on youth mental health, and
 20 (e) otherwise designing and marketing their social media platforms in a way that foreseeably
 21 causes significant harm to the mental health of individual youth that use their platforms and to the
 22 nation’s youth collectively, including the students of Marin County.

23 432. Defendants’ conduct was and is unfair under the UCL because it violated and
 24 continues to violate established public policy of the State of California, including but not limited
 25 to public policy set forth in the California AADCA that passed into law in 2022 and set to take
 26 effect in 2024, and because such conduct was and is immoral, unethical, oppressive, or
 27 unscrupulous and causes injury to Plaintiff, Plaintiff’s students, and other consumers, in a manner
 28 that significantly outweighs the benefits of such conduct.

1 433. Defendants' unlawful and unfair business acts and practices under the UCL are
 2 continuing in nature and are the result of a systematic, coordinated, and ongoing policy and
 3 practice engaged in by Defendants to target youth, addict youth to their social media platforms and
 4 otherwise maximize the time youth spend on their social media platforms at the expense of youth
 5 mental health, and otherwise generate revenue and profit in a manner that significantly harms
 6 youth mental health and causes foreseeable monetary and other harms to schools and communities
 7 including Plaintiff.

8 434. Plaintiff's school districts have suffered injury in fact and have lost money or
 9 property as a direct and proximate result of Defendants' violations of the UCL, including but not
 10 limited to additional time, costs, and expenses that Plaintiff's school districts have incurred – and
 11 will continue for the foreseeable future to incur – for the following:

12 (a) hire and contract additional personnel providing mental and behavioral
 13 health services, including clinicians, counselors, wellness coordinators, social workers, and
 14 medical professionals, to address mental, emotional, and social health issues;

15 (b) develop additional resources to address mental, emotional, and social health
 16 issues, such as crisis response teams to address crises related to or stemming from social media
 17 incidents, including cyberbullying and suicide risks;

18 (c) creation of a student wellness ambassador program;⁴⁷⁰

19 (d) increase trainings for teachers and staff to identify students exhibiting
 20 symptoms affecting their mental, emotional, and social health, including a school-based suicide
 21 risk assessment protocol for Marin County schools;⁴⁷¹

25 ⁴⁷⁰ *Student Wellness Ambassador Program*, Marin County Office of Education,
 26 <https://sites.google.com/marinschools.org/screening/student-events-initiatives/student-wellness-ambassador-program>.

27 ⁴⁷¹ *See, e.g., A School-Based Suicide Risk Assessment Protocol: Effective July 1, 2022*, Marin
 28 County Office of Education, <https://www.marinschools.org/Page/268>.

(e) train teachers and staff on how to promote health social media use and digital citizenship, including how to manage social media use interfering with classroom and learning activities;

(f) train parents on how to provide guidance on social media use and healthy digital citizenship for their children;

(g) hire additional personnel to respond to and manage efforts to combat harm caused by Defendants’ platforms, including cyberbullying, violence, and vandalism;

(h) develop awareness and informational campaigns to educate students about the dangers of using Defendants’ platforms and healthy social media use;

(i) creation of a Marin County Schools Wellness Collaborative that “meets on a monthly basis to discuss best practices to enhance systems of support for adolescent health, mental health, substance use, and sexual health services within the school setting, including resources sharing and trainings”;⁴⁷²

(j) develop trainings, lesson plans, toolkits, books, posters, videos, and other materials to teach students about the dangers of using Defendants’ platforms and healthy social media use;

(k) update teacher, parent, and student handbooks to address use of and harm resulting from social media use during school sessions and when using school-issued technology, including appropriate use of Defendants’ platforms;

(l) update code of conduct for disciplinary infractions resulting from harm caused by Defendants’ platforms, including cyberbullying and threats made against students and teachers using Defendants’ platforms;

(m) repair property damaged as a result of the exploitative and harmful content Defendants directed at students;

⁴⁷² *The Marin Schools Wellness Collaborative*, Wellness: Marin Schools, <https://sites.google.com/marinschools.org/screening/wellness-collaborative>.

(n) increase disciplinary services and time spent addressing cyberbullying, harassment, school disruption, and threats;

(o) confiscate devices on which students were compelled by Defendants' conduct to use while in class or on school campuses to access Defendants' platforms;

(p) meet with students and the parents of students caught using Defendants' platforms at school;

(q) divert time and resources from instructional activities to address student behavioral issues and notify parents and guardians; and

(r) investigate and respond to threats made against schools and students over social media.

435. Plaintiff has no adequate remedy at law and thus seeks preliminary and permanent injunction relief to enjoin Defendants' harmful conduct alleged herein, and as set forth below in the Prayer for Relief.

436. Plaintiff further seeks an award of his litigation costs, expert fees, and attorneys' fees under Cal. Code Civ. Proc. §1021.5 and any other applicable law.

COUNT III

Violation of the Racketeer Influenced and Corrupt Organizations Act ("RICO"), 18 U.S.C. §1961, *et seq.* (Against All Defendants)

437. Plaintiff incorporates each preceding paragraph as though set forth fully herein.

438. This claim is brought by Plaintiff against all Defendants for actual damages, treble damages, and equitable relief under 18 U.S.C. §1964 for violations of RICO, 18 U.S.C. §1961, *et seq.*

439. RICO makes it "unlawful for any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise's affairs through a pattern of racketeering activity." 18 U.S.C. §1962(c).

1 440. At all relevant times, each Defendant is and has been a “person” within the meaning
 2 of 18 U.S.C. §1961(3) because each is capable of holding, and does hold, “a legal or beneficial
 3 interest in property.”

4 441. Each Defendant conducted the affairs of an enterprise through a pattern of
 5 racketeering activity, in violation of 18 U.S.C. §1962(c), as described herein.

6 442. Plaintiff is a “person” within the meaning of 18 U.S.C. §1961(3) and has standing
 7 to sue under 18 U.S.C. §1964(c) because he, and the schools and students under his governance,
 8 were and are injured in their business and/or property “by reason of” the RICO violations described
 9 herein.

10 443. Defendants – through the use of Front Groups that appeared to be independent of
 11 Defendants and through the dissemination of publications that supported Defendants’ scheme –
 12 conducted an association-in-fact enterprise, and/or participated in the conduct of an enterprise
 13 through a pattern of illegal activities (the predicate racketeering acts of fraud by way of corruption
 14 of an official proceeding, and mail and wire fraud) to carry out the common purpose of the
 15 Enterprise, *i.e.*, to promote false and misleading statements to Congress and the American public
 16 about the safety of their platforms for youth users while simultaneously flooding youth with
 17 harmful experiences designed to be addictive, thereby maximizing profits and revenues. Through
 18 the racketeering activities of the Enterprise, Defendants sought to further the public perception
 19 about the safety of their social media platforms for youth by disseminating false statements. In so
 20 doing, each of the Defendants knowingly conducted and participated in the conduct of the
 21 Enterprise by obstructing justice by providing false and misleading testimony to Congress
 22 regarding social media platforms in violation of 18 U.S.C. §1512(c) and by engaging in mail and
 23 wire fraud in violation of 18 U.S.C. §1962(c)-(d).

24 444. Plaintiff demands all applicable relief set forth below in the Prayer for Relief.

25 445. **The Enterprise.** Section 1961(4) defines an enterprise as “any individual,
 26 partnership, corporation, association, or other legal entity, and any union or group of individuals
 27 associated in fact although not a legal entity.” 18 U.S.C. §1961(4).

1 446. The Enterprise alleged above is an association-in-fact enterprise that consists of
2 Defendants and their Front Groups (Net Choice, CCIA, ITI, Tech Net, and Chamber of Progress).

3 447. Defendants formed an association-in-fact for the common and continuing purpose
4 described herein and constitute an enterprise within the meaning of 18 U.S.C. §1961(4) engaged
5 in the conduct of their affairs through a continuing pattern of racketeering activity. The members
6 of the Enterprise functioned as a continuing unit with an ascertainable structure separate and
7 distinct from that of the conduct of the pattern of racketeering activity. There may also be other
8 members of the enterprise who are unknown to Plaintiff at this time.

9 448. Each of the Defendants exerted control over the Enterprise and participated in the
10 conduct of the Enterprise by playing a distinct role in furthering the Enterprise's common purpose
11 of increasing profits through the knowing and intentional dissemination of false and misleading
12 information about the safety of Defendants' social media platforms for youth.

13 449. Specifically, Defendants each worked together to coordinate the Enterprise's goals
14 and conceal their role, and the Enterprise's existence, from the public by, among other things:
15 (1) preserving and enhancing the market for their social media platforms and Defendants' own
16 profits, regardless of the truth, the law, or the health consequences to America's youth, including
17 Plaintiff's students; (2) deceiving consumers, especially children, adolescents, teenagers, and their
18 parents, into using their platforms by falsely maintaining that their platforms are safe for youth;
19 deceiving consumers, especially children, adolescents, and teenagers and their parents, into using
20 their platforms by falsely maintaining that their platforms are safe for youth users and not
21 responsible for the apparent mental or emotional health consequences to children, adolescents, and
22 teenagers, despite that Defendants knew otherwise; (3) deceiving consumers, especially children,
23 adolescents, teenagers, and their parents, into using their platforms by falsely maintaining that
24 Defendants could mitigate the mental or emotional health consequences to children, adolescents,
25 and teenagers, despite Defendants knowing these negative consequences were inherent to their
26 platforms' features and technology; (4) deceiving consumers, especially children, adolescents, and
27 teenagers, into becoming or staying addicted to their platforms by maintaining that their platforms
28 were not addictive or that any addictive consequences could be mitigated, despite the fact that

1 Defendants knew their platforms were inherently addictive by design; (5) deceiving consumers,
2 particularly parents, children, adolescents, and teenagers, by claiming they did not market to
3 children, adolescents, and teenagers while engaging in marketing and manipulation of their
4 platform algorithms with the intent of causing children, adolescents, and teenagers to engage in
5 excessive use of their platforms, regardless of the health or safety concerns; and (6) deceiving
6 consumers about the mental and emotional health risks to children, adolescents, and teenagers
7 associated with Defendants' platforms, including that their platforms were intentionally and
8 deliberately designed to target children, adolescents, and teenagers and encouraging excessive and
9 harmful behavior; that Defendants had the ability to manipulate and did manipulate their platforms
10 to be highly addictive; and that Defendants targeted children, adolescents, and teenagers
11 specifically to maximize their engagement despite knowledge of resultant harm to youth users.

12 450. Each of the Front Groups helped disguise the role of Defendants by purporting to
13 be unbiased, independent professional organizations in order to disseminate a body of messaging
14 that promoted Defendants' false messages.

15 451. The Enterprise has pursued a course of conduct of deceit, misrepresentation, and
16 conspiracy to make misrepresentations to the public; to withhold from the public facts material to
17 the decision to use or permit children, adolescents, and teenagers to use Defendants' platforms;
18 and to promote and maintain sales from Defendants' platforms, and the profits derived therefrom,
19 as well as to shield themselves from public, judicial, and governmental scrutiny.

20 452. At all relevant times, the Enterprise: (a) had an existence separate and distinct from
21 each Defendant and its members; (b) was separate and distinct from the pattern of racketeering in
22 which Defendants engaged; (c) was an ongoing and continuing organization consisting of
23 individuals, persons, and legal entities, including each of the Defendants; (d) was characterized by
24 regular communication and interpersonal relationships between and among each member of the
25 Enterprise, including between Defendants and each of the Front Groups; and (e) had sufficient
26 longevity for the enterprise to pursue its purpose and functioned as a continuing unit.

1 453. The persons and entities engaged in the Enterprise are systematically linked through
2 contractual relationships, financial ties, personal relationships, and continuing coordination of
3 activities, as spearheaded by Defendants.

4 454. Defendants alone could not have accomplished the purpose of the Enterprise
5 without the assistance of the Front Groups, which were perceived as “neutral” as compared to
6 Defendants themselves. Without the work of the Front Groups in spreading misrepresentations
7 about the safety of youth social media use, the Enterprise could not have achieved its common
8 purpose. As a result, it is clear that Defendants and the Front Groups were each a willing
9 participant in the Enterprise, had a common purpose and interest in the object of the scheme, and
10 functioned within a structure designed to effectuate the Enterprise’s purpose.

11 455. **Pattern of Racketeering Activity.** Defendants, each of whom is a person
12 associated with, or employed by, the enterprise, did knowingly, willfully and unlawfully conduct
13 or participate, directly or indirectly in the affairs of the enterprise through a pattern of racketeering
14 activity within the meaning of 18 U.S.C. §§1961(1), 1961(5), and 1962(c). The racketeering
15 activity was made possible by each Defendant’s regular and repeated use of the facilities and
16 services of the Enterprise. Each Defendant had the specific intent to engage in the substantive
17 RICO violations alleged herein.

18 456. Further, each of the Defendants and Front Groups that made up the Enterprise had
19 systematic links to and personal relationships with each other through joint participation in
20 lobbying groups, trade industry organizations, contractual relationships, and continuing
21 coordination of activities. The systematic links and personal relationships that were formed and
22 developed allowed members of the Enterprise the opportunity to form the common purpose and
23 agree to conduct and participate in the conduct of the Enterprise. Specifically, each of the
24 Defendants coordinated its efforts through the same Front Groups, based on their agreement and
25 understanding that the Front Groups were industry friendly and would work together with
26 Defendants to advance the common purpose of the Enterprise; each of the individuals and entities
27 that formed the Enterprise acted to enable the common purpose and fraudulent scheme of the
28 Enterprise.

1 457. Defendants controlled the resources and instrumentalities of the enterprise and used
2 that control to perpetrate numerous misleading schemes, including committing fraud through
3 corruption of an official proceeding by falsely testifying before Congress and through the use of
4 mail and wires. Foremost, separate and apart from their regular business dealings, Defendants
5 misled and continue to mislead the public on the mental health dangers for youth on their
6 platforms.

7 458. Defendants had the common purpose of preserving and enhancing the market for
8 their platforms and for youth as consumers for Defendants' own profits, regardless of the truth,
9 the law, or the health consequences to the American people, including Plaintiff's students and the
10 communities Plaintiff serves.

11 459. Defendants deceived consumers to use Defendants' platforms while concealing
12 and/or suppressing the relevant findings and research. Defendants deceived consumers,
13 particularly parents and children, adolescents, and teenagers, by claiming they did not market to
14 children, adolescents, and teenagers while engaging in marketing and manipulation of their
15 platform algorithms with the intent of causing children, adolescents, and teenagers to engage in
16 excessive use of their platforms, regardless of the health or safety concerns.

17 460. Defendants achieved their common purpose through coconspirators' actions in
18 deceiving consumers, regulators, and the general public about the dangerous nature of their
19 platforms. Through the Enterprise, Defendants engaged in a pattern of racketeering activity
20 consisting of numerous acts of racketeering in the Northern District of California and elsewhere,
21 including corruption of an official proceeding, mail fraud, and wire fraud, indictable offenses
22 under 18 U.S.C. §§1512(c), 1341, and 1343.

23 461. **Predicate Acts.** Defendants each committed, conspired to commit, and/or aided
24 and abetted in the commission of at least two predicate acts of racketeering activity (*i.e.*, violations
25 of 18 U.S.C. §§1512(c), 1341, and 1343) within the past ten years. The multiple acts of
26 racketeering activity that Defendants committed, or aided and abetted in the commission of, were
27 related to each other, posed a threat of continued racketeering activity, and therefore constitute a
28 "pattern of racketeering activity." The racketeering activity was made possible by Defendants'

1 regular use of the facilities, services, distribution channels, and employees of the Enterprise,
 2 testimony before Congress, and the U.S. Mail and interstate wire facilities. Defendants
 3 participated in the scheme to defraud by obstructing justice and by using mail, telephones,
 4 television, and the Internet to transmit false and misleading messaging in interstate or foreign
 5 commerce.

6 462. From a time unknown and continuing until the time of filing of this complaint, in
 7 the Northern District of California and elsewhere, Defendants and others known and unknown did
 8 knowingly and intentionally devise and intend to devise a scheme and artifice to mislead, and
 9 obtain money and property from, members of the public by means of material false and misleading
 10 pretenses, representations, and promises, and omissions of material facts, knowing that the
 11 pretenses, representations, and promises were false when made.

12 463. Defendants' predicate acts of racketeering (18 U.S.C. §1961(1)) include, but are
 13 not limited to:

14 (a) **Corruption of an Official Proceeding:** Defendants violated 18 U.S.C.
 15 §1512(c) by providing false and misleading testimony to the United States Congress and
 16 concealing and/or obstructing, influencing, and/or impeding official proceedings related to the
 17 benefits and safety of youth social media use;

18 (b) **Mail Fraud:** Defendants violated 18 U.S.C. §1341 by sending or receiving,
 19 or by causing to be sent and/or received, messages via U.S. mail or commercial interstate carriers
 20 for the purpose of executing the unlawful scheme to target and addict youth to social media by
 21 means of false pretenses, misrepresentations, promises, and omissions in order to increase profits;
 22 and

23 (c) **Wire Fraud:** Defendants violated 18 U.S.C. §1343 by transmitting and/or
 24 receiving, or by causing to be transmitted and/or received, messages by wire for the purpose of
 25 executing the unlawful scheme to target and addict youth to social media by means of false
 26 pretenses, misrepresentations, promises, and omissions in order to increase profits.

27 464. It was part of said scheme and artifice that Defendants would represent that their
 28 platforms pose no substantial risk of mental or emotional health concern to children, adolescents,

1 and teenagers and were not addictive when, in fact, their platforms did pose such risks and that
2 their platforms were intentionally and deliberately designed to target children, adolescents, and
3 teenagers and encourage excessive and harmful behavior.

4 465. It was further part of said scheme and artifice that Defendants and their
5 coconspirators, through the Enterprise, would and did maintain sales and profits of their platforms
6 by concealing and suppressing material information regarding the mental and emotional health
7 risks to children, adolescents, and teenagers associated with their usage, including that their
8 platforms were intentionally and deliberately designed to target children, adolescents, and
9 teenagers and to encourage excessive and harmful behavior; that they had the ability to manipulate
10 and did manipulate their platforms to be highly addictive; and that Defendants targeted children,
11 adolescents, and teenagers specifically.

12 466. It was further part of said scheme and artifice that, in order to conceal the health
13 risks of their platforms, Defendants and their coconspirators, through the Enterprise, would and
14 did make false representations and misleading statements to the public; would and did falsely
15 represent that Defendants would fund and conduct objective, scientific research and disclose the
16 results of such research to resolve concerns about mental and emotional health related issues to
17 youth; would and did falsely represent that Defendants did not target children, adolescents, and
18 teenagers; would and did suppress and hide adverse research results; would and did misrepresent
19 and fail to disclose their ability to manipulate and the manipulation of their platforms and their
20 addictive qualities; and would and did misrepresent their actions to government personnel and
21 others.

22 467. It was a further part of said scheme and artifice that Defendants and their
23 coconspirators, through the Enterprise, would and did misrepresent, conceal, and hide and cause
24 to be misrepresented, concealed, and hidden the purpose of, and acts done in furtherance of, the
25 scheme.

26 468. It was a further part of said scheme and artifice, and in furtherance thereof, that
27 Defendants would and did communicate with each other and with their coconspirators and others,
28 in person, by mail, and by telephone and other interstate and foreign wire facilities, regarding the

1 true nature of their platforms and the mental and emotional health risks to children, adolescents,
2 and teenagers.

3 469. It was further part of said scheme and artifice that Defendants made
4 communications directed toward government officials and to the public in furtherance of their
5 conspiracy to deceive the public by means of telephone, mail, internet, television, wire
6 transmissions, and other forms of interstate commerce and communications, in violation of 18
7 U.S.C. §1512(c).

8 470. For purposes of executing and attempting to execute that scheme and artifice,
9 Defendants and their coconspirators, through the Enterprise, would and did knowingly transmit
10 and cause to be transmitted in interstate and foreign commerce by means of wire, radio, and
11 television communication writings, signs, signals, pictures, and sounds (collectively
12 “transmissions”) in violation of 18 U.S.C. §§1341, and 1343.

13 471. Because Defendants disguised their participation in the Enterprise and worked to
14 keep even the Enterprise’s existence secret so as to give the false appearance that their false
15 messages reflected the views of independent third parties, many of the precise dates of the
16 Enterprise’s uses of the U.S. Mail and interstate wire facilities (and corresponding predicate acts
17 of mail and wire fraud) have been hidden and cannot be alleged without access to the books and
18 records maintained by Defendants and Front Groups. Indeed, an essential part of the successful
19 operation of the Enterprise alleged herein depended upon secrecy. However, Defendants and Front
20 Groups disseminated misrepresentations and false statements to Marin County and to consumers
21 and regulators in Marin County.

22 472. For the purpose of executing and attempting to execute the scheme and artifice
23 described herein, Defendants and their coconspirators, through the Enterprise, would and did:
24 knowingly provide misleading and false testimony before the United States Congress regarding
25 the safety and targeting of social media platforms to youth, in violation of 18 U.S.C. §1512(c);
26 knowingly transmit those messages by wire, radio, or television; knowingly place and cause to be
27 placed in any post office or authorized depository for mail matter, matters and things to be sent
28 and delivered by the United States Postal Service (and its predecessor, the United States Post

1 Office Department) such false and/or misleading messages; knowingly take and receive therefrom
2 such matters and things; and knowingly cause to be delivered by mail according to the direction
3 thereon, and at the place at which it is directed to be delivered by the person to whom it is
4 addressed, any such messages, in violation of 18 U.S.C. §§1341 and 1343.

5 473. The pattern of racketeering activity alleged herein is continuing as of the date of
6 this complaint and, upon information and belief, will continue into the future unless enjoined by
7 this Court.

8 474. The racketeering activities conducted by Defendants and Front Groups amounted
9 to a common course of conduct, with a similar pattern and purpose, intended to deceive Plaintiff.
10 Each separate instance of corruption of an official proceeding, and use of the U.S. Mail and/or
11 interstate wire facilities employed by Defendants, was related, had similar intended purposes,
12 involved similar participants and methods of execution, and had the same results affecting the
13 same victims, including Plaintiff. Defendants have engaged in the pattern of racketeering activity
14 for the purpose of conducting the ongoing business affairs of the Enterprise.

15 475. Each of the Defendants aided and abetted others in the violations of the above laws,
16 thereby rendering them indictable as principals in the 18 U.S.C. §§1512(c), 1341, and 1343
17 offenses.

18 476. Defendants' violations of law and their pattern of racketeering activity directly and
19 proximately caused Plaintiff, and the schools and students under his governance, injury to their
20 business and property. Defendants' pattern of racketeering activity logically, substantially, and
21 foreseeably caused a youth social media addiction epidemic. But for the youth social media
22 addiction epidemic Defendants created through their Enterprise, neither Plaintiff, nor the school
23 districts under his governance, would have lost money or property. The injuries to Plaintiff and
24 Marin County public schools, as described below, were not unexpected, unforeseen, or
25 independent. Such costs were either completely new or greatly in excess of the norm of what
26 Plaintiff's schools would ordinarily pay or be expected to pay to provide services to their students
27 and communities.

1 477. It was foreseeable and expected that Defendants' creation and then participation in
 2 the Enterprise through a pattern of racketeering activities to carry out their fraudulent scheme,
 3 would lead to a youth social media addiction epidemic, including in in Marin County.

4 478. Plaintiff, and the schools and students under his governance, have suffered injury
 5 in fact and have lost money or property as a direct and proximate result of Defendants' violations
 6 of RICO, including, but not limited to, additional time, costs, and expenses that Plaintiff's school
 7 districts have incurred – and will continue to incur for the foreseeable future to incur – for the
 8 following:

9 (a) hiring additional personnel to address mental, emotional, and social health
 10 issues;

11 (b) developing additional resources to address mental, emotional, and social
 12 health issues;

13 (c) increasing training for teachers and staff to identify students exhibiting
 14 symptoms affecting their mental, emotional, and social health;

15 (d) training teachers, staff, and members of the community about the harms
 16 caused by Defendants' wrongful conduct;

17 (e) developing lesson plans to teach students about the dangers of using
 18 Defendants' platforms;

19 (f) educating students about the dangers of using Defendants' platforms;

20 (g) addressing property damaged as a result of students acting out because of
 21 mental, social, and emotional problems Defendants' conduct is causing;

22 (h) increasing disciplinary services and time spent addressing bullying,
 23 harassment, and threats;

24 (i) confiscating devices on which students use Defendants' platforms while in
 25 class or on Plaintiff's public school campuses;

26 (j) meeting with students and the parents of students caught using Defendants'
 27 platforms at school or addressing other disciplinary matters related to students' use of Defendants'
 28 platforms;

(k) diverting time and resources from instructional activities to notify parents and guardians of students' behavioral issues and attendance;

(l) investigating and responding to threats made against Plaintiff's public schools and students over social media;

(m) updating student handbooks to address use of Defendants' platforms; and

(n) updating school policies to address use of Defendants' platforms.

479. Plaintiff seeks all legal and equitable relief as allowed by law, including, *inter alia*, actual damages; treble damages; equitable and/or injunctive relief in the form of Court-supervised corrective communications, actions and programs; forfeiture as deemed proper by the Court; attorneys' fees; all costs and expenses of suit; and pre- and post-judgment interest.

COUNT IV

Negligence and Gross Negligence (Against All Defendants)

480. Plaintiff incorporates each preceding paragraph as though set forth fully herein.

481. Negligence is established where the defendant owes the plaintiff a duty of care, breaches that duty, and the plaintiff sustains harm proximately caused by the defendant's breach. A presumption of negligence (negligence *per se*) is established where a defendant's negligence involves the violation of a statute or regulation, where the plaintiff is within the class of persons that the statute or regulation was designed to protect, and the violation is a substantial factor in the plaintiff's harm.

482. Gross negligence is the lack of any care or an extreme departure from what a reasonably careful person would do in the same situation to prevent harm to oneself or to others, or where a defendant breaches a duty of care in a way that is unreasonably dangerous to consumers.

483. Defendants owed the public legal duties, including a preexisting duty not to expose Plaintiff's public schools to an unreasonable risk of harm and a duty to exercise reasonable and ordinary care and skill in accordance with the applicable standards of conduct in designing, creating, and marketing a product to youth.

1 484. At all relevant times to this litigation, each of the Defendants owed Plaintiff, and
 2 the schools and students under his governance, duties under statutory and common law, including
 3 the duty to comply with California Business & Professions Code §17200, *et.seq.*'s prohibition on
 4 unlawful, unfair, or fraudulent business acts or practices and the duty to exercise reasonable care
 5 in the design, marketing, promoting, and operating of their platforms, including the duty to take
 6 all reasonable steps necessary to design, market, promote, and operate their platforms in a way that
 7 was not unreasonably dangerous to youth.

8 485. At all times relevant to this litigation, Defendants knew or should have known of
 9 the dangers of Defendants' platforms and, specifically, that their prioritization and creation of
 10 harmful content, and facilitation of widespread, excessive, and habitual use of their platforms by
 11 youth, resulted in and continues to result in significant harm to Plaintiff's students. As such,
 12 Defendants have breached their duty of care owed to Plaintiff, Plaintiff's schools, and Plaintiff's
 13 students. Defendants have breached and continue to breach their duty of care owed to Plaintiff
 14 through their actions, business decisions, and policies in the development, setup, management,
 15 maintenance, operation, marketing, advertising, promotion, supervision, and control of their
 16 respective platforms.

17 486. Defendants' negligence includes:

18 (a) Designing, marketing, promoting, and/or operating their platforms in a
 19 manner intended to prioritize and create harmful content and maximize the time youth spend on
 20 their respective platforms, despite knowledge of the harms to youth from their wrongful conduct;

21 (b) Manipulating users to keep using or coming back to their platforms through
 22 the use of IVRs;

23 (c) Intentionally marketing their platforms to youth, directly facilitating the
 24 widespread, excessive, and habitual use of their platforms among youth; and

25 (d) Knowingly designing and modifying their platforms in ways that promote
 26 excessive and problematic use in ways known to be harmful to children.

27 487. Defendants knew and/or should have known it was foreseeable that Plaintiff would
 28 suffer injuries as a result of Defendants' failure to exercise ordinary care in the designing,

1 marketing, promoting, and/or operating of their platforms, particularly when Defendants targeted
2 youth in Plaintiff's schools.

3 488. Defendants' gross negligence was an extreme departure from the ordinary standard
4 of conduct. Defendants' conduct was so reckless, wanton, and lacking in care that it constitutes a
5 conscious disregard or indifference to the life, safety, or rights of persons exposed to such conduct,
6 including youth in Plaintiff's schools, in that Defendants acted with reckless indifference to the
7 results, or to the rights or safety of others, because Defendants knew, or a reasonable person or
8 company in Defendants' position should have known, that Defendants' conduct created an
9 unreasonable risk of harm, and the risk was so great that it was highly probable harm would result.

10 489. As a direct and proximate cause of Defendants' unreasonable and negligent
11 conduct, Plaintiff has suffered and will continue to suffer harm.

12 490. Plaintiff and Plaintiff's schools were within the protected class of persons that the
13 UCL, Cal. Bus. & Prof. Code §17200, *et seq.*, was designed to protect.

14 **PRAYER FOR RELIEF**

15 WHEREFORE, Plaintiff prays for judgment as follows:

16 A. Entering an order that the conduct alleged herein constitutes a public nuisance
17 under California law;

18 B. Entering an order that Defendants are jointly and severally liable;

19 C. Entering an order requiring Defendants to abate the public nuisance described
20 herein and to deter and/or prevent the resumption of such nuisance;

21 D. Enjoining Defendants and any agents, successors, assigns, and employees acting
22 directly or through any corporate or business device from engaging in further actions causing or
23 contributing to the public nuisance as described herein;

24 E. Enjoining Defendants from further violations of the COPPA and directing that
25 Defendants take affirmative steps to obtain "verifiable parental consent" prior to collecting and
26 using information about them;

1 F. Entering an order that Defendants' conduct is in violation of the UCL, and directing
2 that Defendants take affirmative steps to provide accurate information to the public as to the harms
3 of their services;

4 G. Enjoining Defendants and any agents, successors, assigns, and employees acting
5 directly or through any corporate or business device from engaging in acts and practices alleged
6 in this Complaint or any other acts and practices which violate the UCL;

7 H. Directing Defendants to pay civil penalties in the amount of \$2,500 for each and
8 every violation of the UCL;

9 I. Directing Defendants to disgorge and forfeit all profits they have derived as a result
10 of their unfair and deceptive acts and practices as set forth in this Complaint;

11 J. Awarding equitable relief to fund prevention education and treatment for excessive
12 and problematic use of social media;

13 K. Awarding actual and compensatory damages;

14 L. Awarding statutory damages in the maximum amount permitted by law;

15 M. Awarding reasonable attorneys' fees and costs of suit;

16 N. Awarding pre-judgment and post-judgment interest; and

17 O. Such other and further relief as the Court deems just and proper under the
18 circumstances.

19 **DEMAND FOR JURY TRIAL**

20 Plaintiff hereby demands a trial by jury.

21 DATED: April 28, 2023

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